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RECEIVED

January 4, 2023

JAN - 6 2023

HARMONY TOWNSHIP
LAND USE BOARD

Via UPS and Email – genew@finellicon.com & landuseboard@harmonytwp-nj.gov

Mr. Eugene Weber
Zoning Officer
205 Route 31 N
Washington, N.J. 07882

Ms. Kelly Smith
Board Clerk
3003 Belvidere Road
Phillipsburg, N.J. 08865

RE: NOTICE OF APPEAL PER N.J.S.A. 40:55D-70A
Upgrade of an Existing FCC Licensed Wireless Telecommunication Facility
Appellant: T-Mobile/Sprint
Premises: 318 Garrison Road, Phillipsburg (Harmony Twp.), NJ 08865
Block 38, Lot 1
Site No.: NJ01221A

Dear Mr. Weber and Ms. Smith:

TAKE NOTICE that the appellant, Sprint Spectrum, LP (referred to as "T-Mobile/Sprint"), the lessee of a portion of the property located at 318 Garrison Road, Phillipsburg, N.J. 08865, and designated on the Borough tax maps as Block 38, Lot 1 (the "Property"), hereby appeals to the Harmony Township Land Use Board from the order, determination, or decision of the Zoning Officer, Mr. Eugene Weber, made on the 4th day of January, 2023, denying a zoning permit to T-Mobile/Sprint to upgrade an existing FCC licensed wireless telecommunication facility on the Property in the AR-250 Zone (see attached zoning denial). T-Mobile/Sprint is successor in interest to Sprint via corporate merger and now operates all former Sprint antenna facilities. T-Mobile/Sprint seeks to modify this former Sprint facility so that it will provide reliable and speedy service on the T-Mobile/Sprint network.

The Property is currently developed with a 180' tall electric transmission tower and an existing T-Mobile/Sprint wireless telecommunication facility affixed thereto. The existing T-Mobile/Sprint wireless telecommunication facility includes, but is not limited to, six (6) panel antennas and nine (9) RRU's mounted to the existing tower at an antenna centerline height of 185'-5" (i.e. 188'-4" to top of antennas) as well as one (1) equipment cabinet, one (1) batter cabinet and appurtenances on the ground on an existing concrete pad within an existing fenced compound.

Mr. Eugene Weber

Zoning Officer

NOTICE OF APPEAL PER N.J.S.A. 40:55D-70A

Upgrade of an Existing FCC Licensed Wireless Telecommunication Facility

Appellant: T-Mobile/Sprint

**Premises: 318 Garrison Road, Phillipsburg (Harmony Twp.), NJ 08865
Block 38, Lot 1**

Site No.: NJ01221A

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T-Mobile/Sprint proposes to upgrade the existing facility as follows: (i) remove all six (6) existing antennas from the existing electric transmission tower and to install six (6) new antennas on the tower at a new antenna centerline height of 186'-6" (i.e., 190'-5" to the top of the antennas); (ii) remove nine (9) RRU's and install six (6) new RRU's; (iii) remove the existing T-Mobile/ Sprint equipment cabinet, battery cabinet, DC and Fiber boxes and steel mounting platform and replace same with 1 new cabinet and 1 new battery cabinet installed directly on the existing concrete pad; and (iv) install 3 new cables.

The appellant alleges error in the order, requirement, decision or refusal of said Administrative Officer to issue a zoning permit on the basis that site plan relief is required. As outlined in the attached legal memorandum, T-Mobile/Sprint asserts that the proposed upgrade of the existing wireless telecommunication facility is exempt from discretionary zoning relief per 47 U.S.C.A. 1455, FCC Order 14-153, FCC Declaratory Ruling 20-75 and N.J.S.A. 40:55D-46.2, and that a zoning permit should have been issued without the need for variance, site plan or any other relief under the Municipal Land Use Law. T-Mobile/Sprint also reserves the right to advance additional arguments under any applicable local, state and federal laws or regulations in support of the appeal at the time of public hearing.

TAKE FURTHER NOTICE that you are hereby required to immediately transmit to the Secretary of the Land Use Board all papers constituting the record upon which the action appealed from was taken, in accordance with the Rules of the Land Use Board and the statute in such case made and provided.

TAKE FURTHER NOTICE T-Mobile has the further right to appeal the Zoning Officer's denial of this eligible facilities request directly to federal court on a summary basis and the filing of this appeal to the Land Use Board shall not constitute a waiver or limitation of T-Mobile's additional appeal rights under any applicable local, state and/or federal laws or regulations. Moreover, T-Mobile expressly reserves its rights to appeal the Zoning's Officer's denial to any court of competent jurisdiction concurrently with this appeal to the Land Use Board.

TAKE FURTHER NOTICE that the appellant will be requesting site plan relief or a waiver of site plan relief, as well as any other relief deemed required, in the alternative, from the Joint Land Use Board with respect to applicable sections of the zoning ordinance which may deemed required and said request for relief in the alternative shall not constitute a waiver of T-

Mr. Eugene Weber

Zoning Officer

NOTICE OF APPEAL PER N.J.S.A. 40:55D-70A

Upgrade of an Existing FCC Licensed Wireless Telecommunication Facility

Appellant: T-Mobile/Sprint

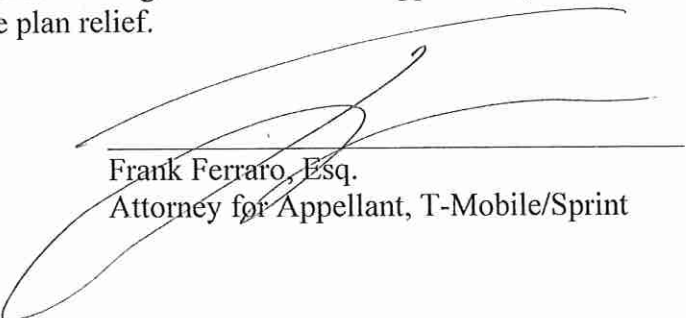
**Premises: 318 Garrison Road, Phillipsburg (Harmony Twp.), NJ 08865
Block 38, Lot 1**

Site No.: NJ01221A

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Mobile/Sprint's appeal rights under any applicable local, state and/or federal laws. Enclosed please find a copy of a legal memorandum citing the basis for this appeal and, in the alternative, site plan relief and/or a waiver of site plan relief.

Date: January 4, 2023



Frank Ferraro, Esq.

Attorney for Appellant, T-Mobile/Sprint

FF/enc.

(NOTE: THIS NOTICE OF APPEAL MUST BE SERVED UPON THE ADMINISTRATIVE OFFICER FROM WHOM THE APPEAL IS TAKEN WITHIN 20 DAYS OF THE DATE OF THE ACTION WHICH IS APPEALED)

Cc: Gregory Gianforcaro, Esq. – Land Use Board Attorney (courtesy copy via email – greg@gianforcarolawfirm.com)

TOWNSHIP OF HARMONY
APPLICATION FOR ZONING PERMIT
NON-REFUNDABLE APPLICATION FEE OF \$20.00
CASH OR CHECKS MADE OUT TO THE TOWNSHIP OF HARMONY

PRINT CLEARLY WITH INK, do not use pencil. Please answer all questions. Attach a plot plan or survey of the property, drawn to scale, showing what exists now on the property and what changes you propose to make. **INCLUDE DISTANCES FROM ALL YOUR PROPERTY LINES AND EXISTING STRUCTURES/WELL/SEPTIC**

Include existing and proposed structures, septic areas, pools, sheds, wall location, paved areas, signs, etc. Show the dimensions of each.

If a new residential dwelling is proposed, show the footprint dimension and the livable floor area of each floor and each dwelling unit. Livable floor area does not include the floor space taken by basement, cellar or garage. **Plans for the proposed construction must accompany application.**

If the applicant is other than the property owner, an affidavit of ownership may be needed.

Name of Applicant T-Mobile /Sprint	Name of Owner (if different) Clarence R. Garrison
Address of Applicant c/o Frank Ferraro, Esq., Ferraro & Stamos LLP, 22 Paris Ave, Ste. 105, Rockleigh, NJ 07647	Address of Owner (if different) 318 Garrison Rd., Phillipsburg, NJ 08865
Phone 201-767-4122	Phone 201-767-4122
What is the <i>present</i> use of the <i>principal</i> building? FCC License Wireless telecommunication facility including 6 antennas and 9 RRUs affixed to a 180' tall electric transmission tower at a height of 188'-4" and equipment cabinets on the ground.	
What is the <i>proposed</i> use of the <i>principal</i> building? T-Mobile/Sprint proposes to modify the existing facility by swapping out 6 existing antennas with 6 new antennas and replacing 9 RRUs with 6 new RRUs at a maximum height of 196'-5". On the ground, T-Mobile/Sprint will remove the existing Sprint equipment cabinet, battery cabinet, DC and Fiber boxes and steel mounting platform and replace same with 1 new equipment cabinet and 1 new battery cabinet installed on the existing concrete pad. Finally, 3 new cables	
What is the <i>present</i> use(s) of any <i>accessory</i> building(s)? are proposed. This existing facility modification qualifies as an "eligible facilities request" per 47 USCA 1455 and will not cause a "substantial change to the facility as exclusively defined by the FCC. As such, the proposed modification is exempt from local discretionary zoning regulation and all approvals/permits must be approved within 60 days of filing information sufficient to demonstrate "eligible facilities request" status. Please see attached legal addendum.	
What are the <i>proposed</i> uses of any new structures or additions for which a zoning permit is requested? No change of use is proposed. Based upon applicable federal law, the applicant requests that a zoning permit be issued for this modification of existing T-Mobile /Sprint wireless telecommunication facility.	

State whether the property has been the subject of any prior application(s) to the Planning Board or the Board of Adjustment. If none, state none. If so, state nature of applications, dates and action(s) of the Board.

318 Garrison Road
Actual address of premises
Zone AR-250

38, 1
Block No Lot No

I hereby make application for a zoning permit for the changes described above and on the attached plot plan or survey map. I understand that before starting construction, a building permit may be required. Answers to the above questions and representations made on any attachments to this application are true and complete to the best of my knowledge.

VALID EMAIL ADDRESS: frank@ferrarostamos.com
PRINT CLEARLY

Date 1.4.2023

Signature of Applicant
Frank Ferraro, Esq., Attorney for Applicant

APPLICANT DO NOT WRITE BELOW HERE

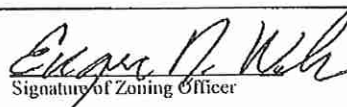
Amt. Fee Received _____ Date Received _____ Date Mailed To Zoning _____

Date Permit Issued:

Date Denial Issued: January 4, 2023

REASON FOR DENIAL: Pursuant to Chapter 525-33.1(9) of the Harmony Code, no modification shall be made to an existing wireless communications facility without the review and approval of a site plan by the Land Use Board. Based upon this provision the Zoning Officer has no jurisdiction to grant the requested approval.

ZONING RELIEF REQUIRED FROM: _____


Signature of Zoning Officer

Ferraro & Stamos, LLP

Attorneys at Law

FRANK FERRARO*

CONSTANTINE STAMOS*

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deans@ferrarostamos.com

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(914) 684-2088

Mailing Address:
P.O. Box 158
Rockleigh, NJ 07647-0158

To: **Via UPS and Email – genew@finellicon.com & clerk@hamonytwp-nj.gov**
Mr. Eugene Weber
Zoning Official
205 Route 31N
Washington, N.J. 07882
Ms. Kelly Smith
Clerk
205 Route 31N
Washington, N.J. 07882

From: Frank Ferraro, Esq.
Ferraro & Stamos LLP
Attorneys for T-Mobile/Sprint

RE: **T-Mobile/Sprint**
Zoning Permit/Exemption Request to Upgrade Existing Wireless
Telecommunication Facility on the Property
318 Garrison Road, Phillipsburg (Harmony Twp.), N.J. 08865
Block 38, Lot 1
Site number: NJ01221A

Date: 1/3/2023

**LEGAL MEMORANDUM ON BEHALF OF T-MOBILE/SPRINT REQUESTING A
DETERMINATION THAT THE PROPOSED FACILITY UPGRADE IS EXEMPT FROM
PLANNING BOARD OR ZONING BOARD OF ADJUSTMENT JURISDICTION
PURSUANT TO 47 U.S.C.A. 1455, FCC ORDER 14-153 AND FCC DECLARATORY
ORDER 20-75 (collectively the "Spectrum Act")**

UPGRADE OF EXISTING TELECOMMUNICATION FACILITY

T-Mobile is successor in interest to Sprint Spectrum LP via corporate merger and now operates all former Sprint antenna facilities. T-Mobile seeks to modify this former Sprint facility so that it will provide reliable and speedy service on the T-Mobile network. T-Mobile/Sprint currently maintains a FCC licensed wireless telecommunication facility at the subject property which includes 6 panel antennas and 9 RRUs affixed to the existing 180' tall First Energy electric transmission tower at a height of 188'-4" and 2 equipment cabinets, 1 battery cabinet and appurtenances on an existing concrete pad within an existing fenced compound. T-Mobile/Sprint proposes to upgrade the existing facility by swapping out 6 existing antennas with 6 new antennas on the existing tower, replacing 9 older RRU's with 6 new RRU's at a maximum height of 190'-5". On the ground, T-Mobile/Sprint will remove the existing Sprint equipment cabinet, battery cabinet, DC and Fiber boxes and steel mounting platform and replace same with 1 new

cabinet and 1 new battery cabinet installed directly on the existing concrete pad. Finally, 3 new cables will be installed. Since the replacement antennas are slightly taller than the ones they replace, the modification will result in a de minimis increase in antenna height of 2'-1". No additional ground disturbance is proposed as a result of the proposed equipment swap.

I. 47 U.S.C.A. Section 1455, FCC Order 14-153, released 10/21/14, and FCC Declaratory Order 20-75, released June 10, 2020 (collectively referred to as the "Spectrum Act") Exempts the T-Mobile/Sprint Facility Upgrade from the Zoning Process under the Municipal Land Use Law

The need to streamline the approval process for collocation facilities is codified in 47 U.S.C.A. Section 1455 ("Spectrum Act"), which was signed into law by President Obama on February 22, 2012 (*see attached*) and which now mandates that state and local governments must approve eligible facilities request for the modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station. This mandate was echoed in FCC Order 14-153 which was released on October 21, 2014.

The Spectrum Act defines "eligible facilities request" as any request for modification of an existing wireless tower or base station that involves: (i) **collocation of new transmission equipment**; (ii) removal of transmission equipment; or (iii) **replacement of transmission equipment**. The FCC defines "base station" to include a structure that currently supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a base station at the time the application is filed including a building. Currently, the property is developed with an existing T-Mobile/Sprint wireless telecommunication facility on the existing 180' tall electric transmission tower. Therefore, under federal law, the proposed T-Mobile/Sprint upgrade represents the replacement of transmission equipment and clearly falls under the definition of an "eligible facilities request."

Furthermore, FCC Order 14-153 sets forth that a collocation, removal or replacement of antennas/equipment at an existing wireless facility does not result in a "substantial change" unless:

(1) for towers/base station outside of public rights-of-way, it increases the height by more than **20 feet or 10%, whichever is greater**. The T-Mobile/Sprint replacement antennas meet this criteria since they will be installed at almost the same location and as the existing antennas they replace. The antenna centerline height will only increase by 13" and the top of antenna height will change by 2'-1" which is minimal and drastically less than the 20' height increase permitted as-of-right by federal law. Therefore, the proposed T-Mobile/Sprint modification is 9 times lower than the height increase permitted under this provision and is well within compliance with this section.

(2) for towers/buildings outside of public rights-of-way, it protrudes from the edge of the tower/base station more than twenty feet, or more than the width of the tower structure/ base station at the level of the appurtenance, whichever is greater. The T-Mobile/Sprint replacement antennas meets this criteria since the antennas will be installed in the same manner as the ones they replace and will have NO impact on the width of the existing tower.

(3) it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets. *T-Mobile/Sprint is proposing to replace 1 existing equipment cabinet and 1 battery cabinet with 1 new equipment cabinet and 1 new battery cabinet on an existing concrete pad and so the number of equipment cabinets at the site will remain the same in compliance with this provision.*

(4) it entails any excavation or deployment outside the current site of the tower or base station. *There is no work proposed outside of the existing lease area and no excavation is proposed in compliance with this provision.*

(5) it would defeat the existing concealment elements of the tower or base station. *The existing electric transmission tower does not contain any concealment elements and the T-Mobile replacement antennas will be installed in the same manner as the existing ones in compliance with this provision.*

OR

(6) it does not comply with conditions associated with the prior approval of the tower or base station unless the non-compliance is due to an increase in height, increase in width, addition of antennas/cabinets, or new excavation that does not exceed the corresponding "substantial change" thresholds. *Any condition contained in a prior Board approval which requires further zoning for the modification of an existing wireless facility or collocation of antennas at the site is preempted by federal law since said facilities qualify as "eligible facilities" under the Spectrum Act and there will be no "substantial change" as defined by the FCC. In fact, such a condition would fly in the face of the express purpose of the Spectrum Act which is to expedite the deployment of existing wireless facility upgrades and collocations on existing structures to ensure that the most advanced wireless communications technology available is being deployed for public use without the delay. The proposed T-Mobile facility upgrade will comply with this provision as the replacement and collocation of antennas and equipment at an existing telecommunication site is permitted and not subject to local discretionary zoning regulations per federal law.*

As you can see from the submission, the proposed T-Mobile/Sprint facility upgrade will not exceed the thresholds noted above and is therefore exempt under the Spectrum Act. The Spectrum Act effectively preempts the discretionary review rights of states and municipalities that was carved out under Section 704 of the Telecommunications Act of 1996. As a result, minor facility upgrades such as the one proposed by T-Mobile/Sprint are only subject to administrative review processes and not discretionary review processes that would allow a state or local government to deny or condition an eligible facilities request.

Therefore, the proposed T-Mobile/Sprint facility upgrade should be exempt from formal zoning approval. A copy of the Spectrum Act has been attached.

II. FCC Order 14-153, paragraph 215 ("Shot Clock Ruling") requires that the T-Mobile/Sprint Facility Upgrade proposal be acted upon within 60 days.

The FCC has decided in FCC Order No. 14-153, paragraph 215, that a 60-day period for review, including review to determine whether an application is complete, is appropriate. In addition, as set forth in paragraph 216, "because the timeframes sets an absolute limit that – in the event of failure to act – results in a deemed grant."

The intent of the Shot Clock Ruling is to bring about a speedy resolution to what are considered rather simplistic collocation facilities such as the one proposed in this application, and we respectfully request and appreciate your timely attention to this exemption request.

III. Conclusion

Based upon the legislative support cited above, we request that the Zoning Office reconsider the zoning denial issued on 11/14/22 issued with respect to the proposed T-Mobile facility upgrade.

C

Effective: February 22, 2012

United States Code Annotated Currentness

Title 47. Telegraphs, Telephones, and Radiotelegraphs

Chapter 13. Public Safety Communications and Electromagnetic Spectrum AuctionsSubchapter IV. Spectrum Auction Authority

→ → § 1455. Wireless facilities deployment

(a) Facility modifications**(1) In general**

Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104-104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) Eligible facilities request

For purposes of this subsection, the term "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves--

(A) collocation of new transmission equipment;

(B) removal of transmission equipment; or

(C) replacement of transmission equipment.

(3) Applicability of environmental laws

Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.

(b) Federal easements and rights-of-way**(1) Grant**

If an executive agency, a State, a political subdivision or agency of a State, or a person, firm, or organization applies for the grant of an easement or right-of-way to, in, over, or on a building or other property owned by the Federal Government for the right to install, construct, and maintain wireless service antenna structures and equipment and backhaul transmission equipment, the executive agency having control of the building or other property may grant to the applicant, on behalf of the Federal Government, an easement or right-of-way to perform

such installation, construction, and maintenance.

(2) Application

The Administrator of General Services shall develop a common form for applications for easements and rights-of-way under paragraph (1) for all executive agencies that shall be used by applicants with respect to the buildings or other property of each such agency.

(3) Fee

(A) In general

Notwithstanding any other provision of law, the Administrator of General Services shall establish a fee for the grant of an easement or right-of-way pursuant to paragraph (1) that is based on direct cost recovery.

(B) Exceptions

The Administrator of General Services may establish exceptions to the fee amount required under subparagraph (A)--

(i) in consideration of the public benefit provided by a grant of an easement or right-of-way; and

(ii) in the interest of expanding wireless and broadband coverage.

(4) Use of fees collected

Any fee amounts collected by an executive agency pursuant to paragraph (3) may be made available, as provided in appropriations Acts, to such agency to cover the costs of granting the easement or right-of-way.

(c) Master contracts for wireless facility sitings

(1) In general

Notwithstanding section 704 of the Telecommunications Act of 1996 or any other provision of law, and not later than 60 days after February 22, 2012, the Administrator of General Services shall--

(A) develop 1 or more master contracts that shall govern the placement of wireless service antenna structures on buildings and other property owned by the Federal Government; and

(B) in developing the master contract or contracts, standardize the treatment of the placement of wireless service antenna structures on building rooftops or facades, the placement of wireless service antenna equipment on rooftops or inside buildings, the technology used in connection with wireless service antenna structures or equipment placed on Federal buildings and other property, and any other key issues the Administrator of General Services considers appropriate.

(2) Applicability

The master contract or contracts developed by the Administrator of General Services under paragraph (1) shall

apply to all publicly accessible buildings and other property owned by the Federal Government, unless the Administrator of General Services decides that issues with respect to the siting of a wireless service antenna structure on a specific building or other property warrant nonstandard treatment of such building or other property.

(3) Application

The Administrator of General Services shall develop a common form or set of forms for wireless service antenna structure siting applications under this subsection for all executive agencies that shall be used by applicants with respect to the buildings and other property of each such agency.

(d) Executive agency defined

In this section, the term "executive agency" has the meaning given such term in section 102 of Title 40.

CREDIT(S)

(Pub.L. 112-96, Title VI, § 6409, Feb. 22, 2012, 126 Stat. 232.)

HISTORICAL AND STATUTORY NOTES

References in Text

The Telecommunications Act of 1996, referred to in subsecs. (a)(1), (c), is Pub.L. 104-104, Feb. 8, 1996, 110 Stat. 56, which in part enacted part II of subchapter II of chapter 5 of Title 47 (47 U.S.C.A. § 251 et seq.). Section 704 of the Act amended 47 U.S.C.A. § 332 and enacted provisions set out as a note under that section. For complete classification, see Short Title set out note under 47 U.S.C.A. § 609 and Tables.

The National Historic Preservation Act, referred to in subsec. (a)(3), is Pub.L. 89-665, Oct. 15, 1966, 80 Stat. 915, as amended, which is classified generally to subchapter II of chapter 1A of Title 16, 16 U.S.C.A. § 470 et seq. For complete classification, see section 470(a) of this title and Tables.

The National Environmental Policy Act of 1969, referred to in subsec. (a)(3), is Pub.L. 91-190, Jan. 1, 1970, 83 Stat. 852, as amended, which is classified principally to chapter 55 of Title 42, 42 U.S.C.A. § 4321 et seq. For complete classification, see Tables.

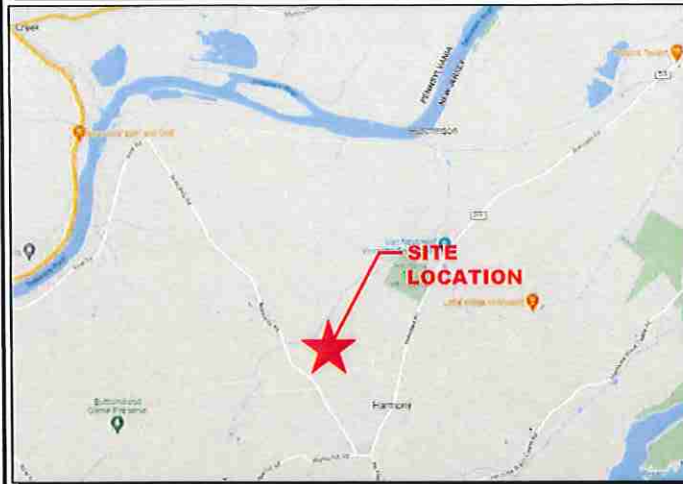
47 U.S.C.A. § 1455, 47 USCA § 1455

Current through P.L. 112-207 (excluding P.L. 112-199 and 112-206) approved 12-7-12

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END OF DOCUMENT

VICINITY MAP



AERIAL MAP



DRIVING DIRECTIONS

FROM SPRINT PARSIPPANY OFFICE:

HEAD NORTHWEST TOWARD SYLVAN WAY. TURN LEFT TOWARD SYLVAN WAY. TURN LEFT ONTO SYLVAN WAY. TURN RIGHT ONTO DRYDEN WAY. KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR U.S. 1 E AND MERGE ONTO NJ-10 E. SLIGHT RIGHT ONTO THE INTERSTATE 287 S RAMP TO MORRISTOWN. MERGE ONTO I-287 S. TAKE EXIT 21B TO MERGE ONTO I-78 W TOWARD EASTON PENNSYLVANIA. TAKE EXIT 3 FOR US-22 TOWARD NJ-122/PHILLIPSBURG/ALPHA. CONTINUE ONTO US-22 W. TURN RIGHT ONTO COUNTY ROAD 519. TURN RIGHT ONTO BELVIDERE RD. TURN LEFT ONTO GARRISON RD. DESTINATION WILL BE ON THE RIGHT.

APPLICABLE CODES

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- 2018 INTERNATIONAL BUILDING CODE, NJ EDITION
- INTERNATIONAL MECHANICAL CODE
- ANSI/TIA-222 STRUCTURAL STANDARD
- NFPA 780 - LIGHTNING PROTECTION CODE
- UNIFORM PLUMBING CODE
- NATIONAL ELECTRICAL CODE



SPRINT RETAIN CONSTRUCTION DRAWINGS

SITE ID #: NJ01221A (NY54XC668)
SITE NAME: NJ01221A
CONFIGURATION: 67E5D998E 6160
SITE TYPE: FIRST ENERGY TRANSMISSION
TOWER # JC-71HY
DIAMOND SITE: NJ037
SITE ADDRESS: 318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

PROJECT INFORMATION

PROPERTY OWNER:
ENDA GARRISON
254 GARRISON ROAD
PHILLIPSBURG, NJ 08865

SITE ADDRESS:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

GEOGRAPHIC COORDINATES:
LAT.: 40° 45' 25.5954" N (40.75711°)
LONG.: 75° 08' 25.6344" W (-75.140454°)

BLOCK / LOT: 2110
BLOCK: 38
LOT: 38
ZONE: TBD
JURISDICTION: TOWNSHIP OF WARREN

POWER:
GPU ENERGY
TELCO/FIBER:
TO BE PROVIDED

APPLICANT:
SPRINT SPECTRUM REALTY COMPANY, LLC
4 SYLVAN WAY
PARSIPPANY, NJ 07054

SITE ACQUISITION:
TRANSCEND WIRELESS
10 INDUSTRIAL AVE., SUITE 3
MAHWAH, NJ 07430
CONTACT: MIKE KITHCART
EMAIL: mkithcart@transcendwireless.com
PHONE: (973) 626-5792

PLANS PREPARED BY:
RAMAKER & ASSOCIATES, INC.
855 COMMUNITY DRIVE
SAUK CITY, WI 53583
CONTACT: KEITH BOHNSACK
EMAIL: kbohnsack@ramaker.com
PHONE: (608) 643-4100

CONSTRUCTION MANAGER:
MIKE SANZO
Michael.J.Sanzo@t-mobile.com
(973) 207-0025

APPROVALS

APPROVED BY	SIGNATURE	DATE
PROJECT MANAGER:		
SITE ACQUISITION:		
ZONING:		
CONSTRUCTION MANAGER:		
RF ENGINEER:		
OPERATIONS MANAGER:		
DEVELOPMENT MANAGER:		
REGULATORY:		

SCOPE OF WORK

- REMOVE (6) EXISTING PANEL ANTENNAS
- REMOVE (6) EXISTING RRUS
- REMOVE (2) EXISTING EQUIPMENT CABINETS
- ADD (3) PROPOSED PANEL ANTENNAS ON EXISTING MOUNTS
- ADD (6) PROPOSED RRUS ON EXISTING MOUNTS
- ADD (1) PROPOSED ERICSSON 6160 SITE SUPPORT CABINET
- ADD (1) PROPOSED ERICSSON B160 BATTERY CABINET
- ADD (3) PROPOSED ERICSSON HYBRID TRUNK 6/24

SHEET INDEX

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G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS

Sprint T-Mobile

4 SYLVAN WAY
PARSIPPANY, NJ 07054

Transcend Wireless

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James R. Skowronski

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MARK	DATE	DESCRIPTION
2	12/01/22	REVISED TO INCLUDE PARCEL MAP
1	09/09/22	REVISED PER LL COMMENTS
0	05/25/22	ISSUED AS FINAL
ISSUE	FINAL	DATE ISSUED 05/25/2022

PROJECT TITLE:
NJ01221A
(NY54XC668)

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
TITLE SHEET
















SCALE: NONE

PROJECT NUMBER: 55895
SHEET NUMBER: T-1


GENERAL NOTES:

1. THE PROPOSED INSTALLATION WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
2. THE PROPOSED INSTALLATION IS UNMANNED AND IS NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS IS REQUIRED)
3. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY SPRINT TECHNICIANS.
4. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS PROPOSAL.
5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
6. ALL REFERENCES TO SPECIFIC STANDARDS FOR THIS PROPOSAL ARE UNDERSTOOD TO BE THE LATEST VERSION.
7. THE TENDERED MUST UNDERGO A SITE VISIT TO CAREFULLY EXAMINE AND UNDERSTAND THE SCOPE OF THE WORK REQUIRED BEFORE BID SUBMISSION. NO COMPENSATION IN ANY FORM WILL BE PAID FOR EXPENSES RESULTING FROM FAILURE TO DO SO.
8. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONSTRUCTION MANAGER.
9. CONTRACTOR IS RESPONSIBLE FOR FIELD MEASUREMENTS TO CONFIRM LENGTHS OF CABLE TRAYS, ELECTRICAL LINES, AND ANTENNA CABLES.
10. ROUTING OF ALL CONDUITS, CABLES, CABLE TRAYS, ETC. IS INDICATED AT PROPOSED LOCATIONS ONLY. CONFIRM THE EXACT ROUTING WITH THE ON-SITE CONSTRUCTION MANAGER PRIOR TO THE START OF WORK.
11. ALL DAMAGE OR OPENING UP OF THE EXISTING STRUCTURE MUST BE MADE GOOD TO THE PRE-CONSTRUCTION CONDITION OR BETTER.
12. INSPECTION OF COMPLETED WORK IS REQUIRED BEFORE COVERING UP. PROVIDE A MINIMUM OF 72 HOURS NOTICE TO CONSULTANT.
13. REMOVE AND CLEAN UP ANY DEBRIS OR MATERIAL FROM THE SITE THROUGHOUT THE DURATION OF THE CONTRACT ON A DAILY BASIS AND UPON COMPLETION OF THE WORK AS DIRECTED BY THE CONSTRUCTION MANAGER.
14. OBTAIN AND PAY FOR ALL ELECTRICAL PERMITS AND INSPECTIONS REQUIRED FOR COMPLETION OF WORK AND ACCEPTANCE. PROVIDED CERTIFICATES TO THE CONSTRUCTION MANAGER VERIFYING THAT THE WORK CONFORMS TO THE REQUIREMENTS OF ALL CODES AND AUTHORITIES HAVING JURISDICTION.
15. PROVIDE SPRINT WITH A WRITTEN WARRANTY, EFFECTIVE FOR ONE YEAR AFTER DATE OF ACCEPTANCE. FOR THE COMPLETE INSTALLATION REPAIR OR REPLACE ANY DEFECTS ARISING DURING THIS PERIOD AT NO EXTRA COST TO SPRINT.
16. NO DEVIATIONS FROM DESIGN SHOWN ON THESE DRAWINGS IS ALLOWED WITHOUT WRITTEN APPROVAL FROM THE CONSULTANT. FAILURE TO OBSERVE THIS RULE MAY RESULT IN CONTRACTOR CORRECTING THE INSTALLATION AT THEIR EXPENSE.
17. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND NATIONAL CODES, REGULATIONS AND SAFETY REGULATIONS, ALL OSHA REGULATIONS, ALL PUBLIC AND MUNICIPAL AUTHORITIES, AND ANY UTILITY COMPANIES' REGULATIONS AND DIRECTIVES.
18. THE DRAWINGS AND SPECIFICATIONS ARE A GENERAL DIRECTIVE FOR THE SCOPE OF WORK. EXACT DIMENSIONS AND LOCATIONS MAY CHANGE IN THE FIELD. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS AND LOCATIONS AND REPORT ANY AND ALL DISCREPANCIES TO REPRESENTATIVE. ANY MINOR ERRORS AND OMISSIONS IN THE DRAWINGS AND SPECIFICATIONS DO NOT EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS.
19. VERIFICATION THAT EXISTING BUILDING CAN SUPPORT THE PROPOSED ANTENNA, COAX AND ADDITIONAL EQUIPMENT LOADING IS TO BE DONE BY OTHERS.
20. ANTENNA AZIMUTHS SHOWN ON THESE DRAWINGS ARE BASED ON TRUE NORTH. ALL AZIMUTHS MUST BE VERIFIED WITH THE CORRECT SMR PRIOR TO CONSTRUCTION

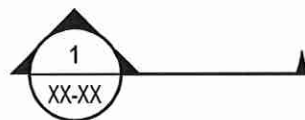
LEGEND AND SYMBOLS:

CHAIN LINK FENCE	
WOOD FENCE	
EXISTING ELECTRICAL	
PROPOSED ELECTRICAL	
EXISTING FIBER	
PROPOSED FIBER	
EXISTING TELCO	
PROPOSED TELCO	
EXISTING OVERHEAD ELECTRIC	
PROPOSED OVERHEAD ELECTRIC	
EXISTING OVERHEAD FIBER	
PROPOSED OVERHEAD FIBER	
EXISTING OVERHEAD TELCO	
PROPOSED OVERHEAD TELCO	
PARCEL BOUNDARY	
CENTERLINE	

ELEVATION

 EXISTING / PROPOSED ELEVATION
@ XXX'-X" AGL

DETAIL NUMBER
SECTION CUT
SHEET NUMBER



ABBREVIATIONS:

AFS	ABOVE FINISHED SLAB
AGL	ABOVE GRADE LEVEL
ARL	ABOVE ROOF LEVEL
ALUM	ALUMINUM
AB	ANCHOR BOLT
L	ANGLE
ARCH	ARCHITECTURAL
BTS	BASE TRANSMISSION SYSTEM
BLDG	BUILDING
BM	BEAM
BOT	BOTTOM
B.O.	BOTTOM OF
BOC	BOTTOM OF CONCRETE
BOS	BOTTOM OF STEEL
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER
DIA / Ø	DIAMETER
DTL	DETAIL
(E)	EXISTING
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRIC/ELECTRICAL
EL	ELEVATION
EQ	EQUAL
EW	EACH WAY
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FHFB	FLEXI RRH 4-PIPE 1900
FIN	FINISH
FIN	FLR FINISH FLOOR
FLR	FLOOR
FSMF	FLEXI MULTIRADIO SYSTEM MODULE
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GYP	GYPSON
GB	GYPSON BOARD
HM	HOLLOW METAL
HOR	HORIZONTAL
HR	HOUR
HT	HEIGHT
HVAC	HEATING VENTILATION AIR CONDITIONING

INSUL	INSULATION
INT	INTERIOR
JT	JOINT
LAM	LAMINATED
LF	LINEAL FOOT
MANUF	MANUFACTURER
MAX	MAXIMUM
MECH	MECHANICAL
MH	MANHOLE
MM	MILLIMETER
MIN	MINIMUM
MISC	MISCELLANEOUS
MPH	MILES PER HOUR
MTL	METAL
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
PCS	PERSONAL COMMUNICATION SYSTEM
PL	PLATE
PR	PAIR
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PT	PRESSURE TREATED
RAD	RADIUS
RD	ROOF DRAIN
REINF	REINFORCED/REINFORCING
REQ'D	REQUIRED
RM	ROOM
R/W	RIGHT OF WAY
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FOOT
SIM	SIMILAR
SQ FT / SF	SQUARE FOOT
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUC	STRUCTURAL
TEMP	TEMPORARY
THK	THICK
TMA	TOWER MOUNTED ANTENNA
T.O.	TOP OF
TOS	TOP OF STEEL
TOC	TOP OF CONCRETE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W/	WITH
WWW	WELDED WIRE MESH



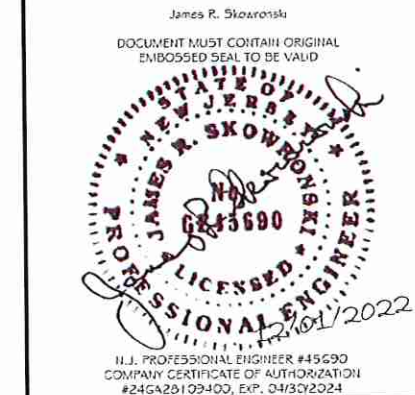
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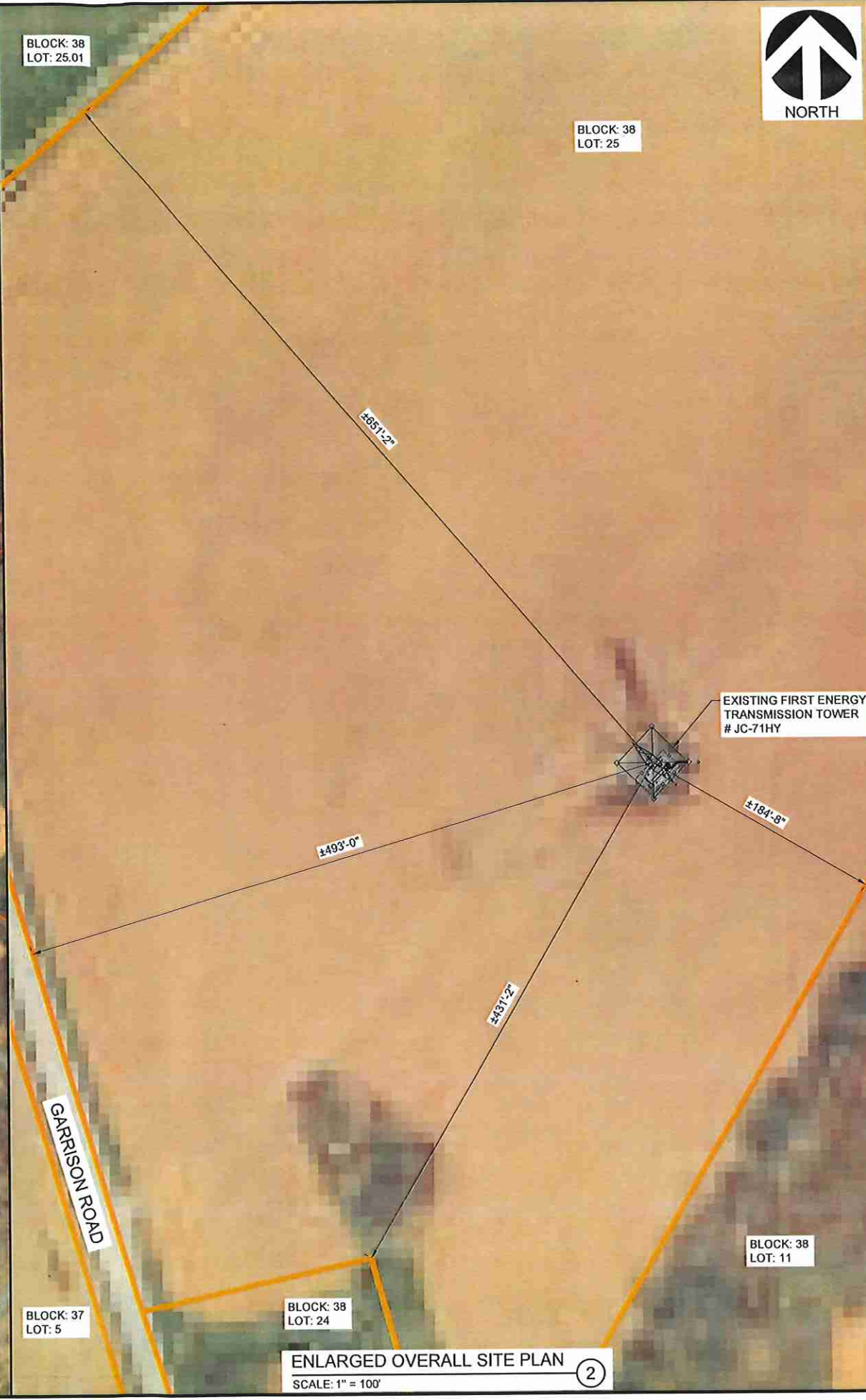
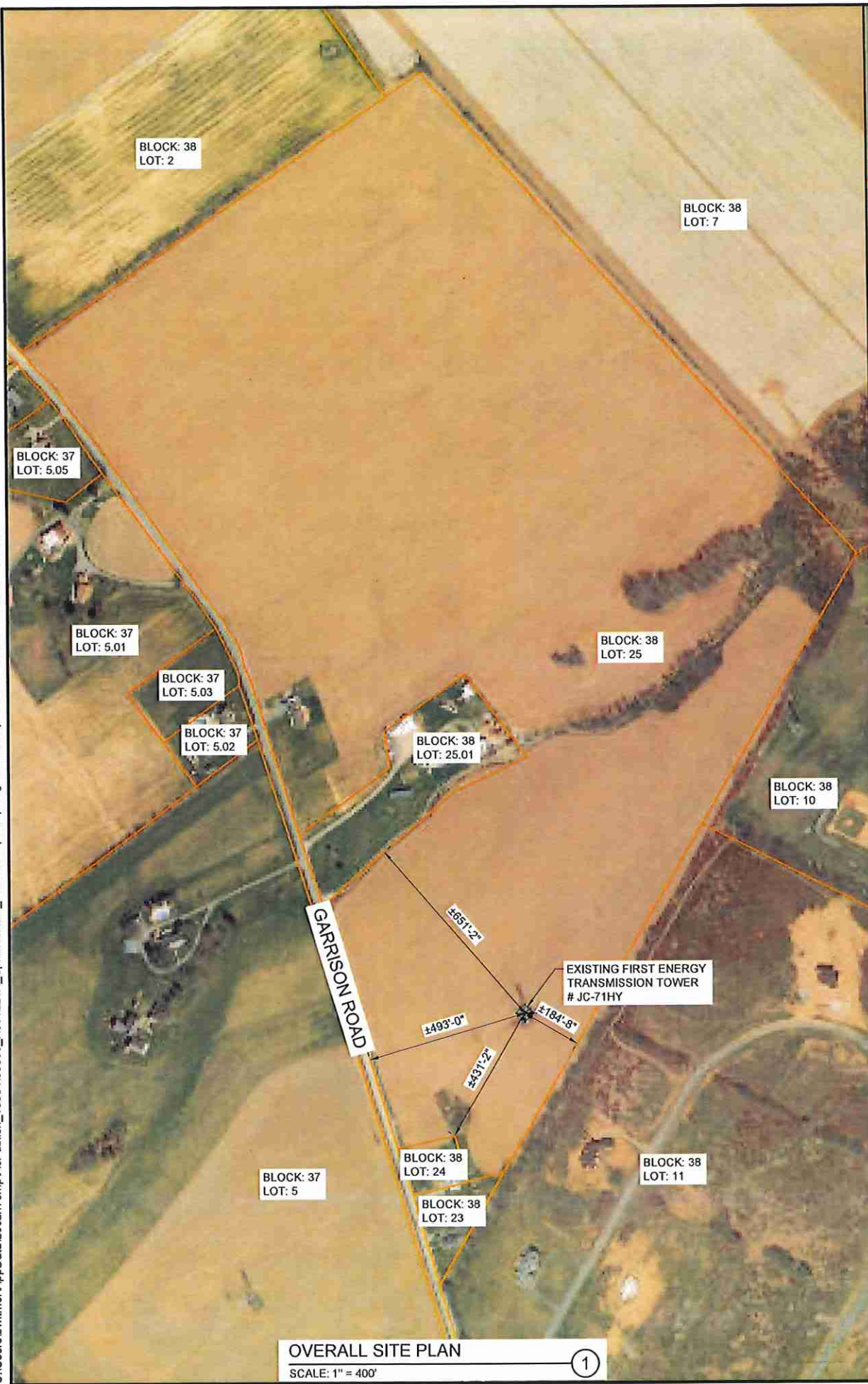
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ISSUE	FINAL	DATE ISSUED 05/25/2022
PROJECT TITLE:		
NJ01221A (NY54XC668)		
PROJECT INFORMATION 318 GARRISON ROAD PHILLIPSBURG, NJ 08865 WARREN COUNTY		
SHEET TITLE:		
SPECIFICATIONS		
SCALE: NONE		
PROJECT NUMBER	55895	
SHEET NUMBER	SP-1	



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ISSUE	DATE
PHASE	ISSUED
FINAL	05/25/2022

PROJECT TITLE:

NJ01221A
(NY54XC668)

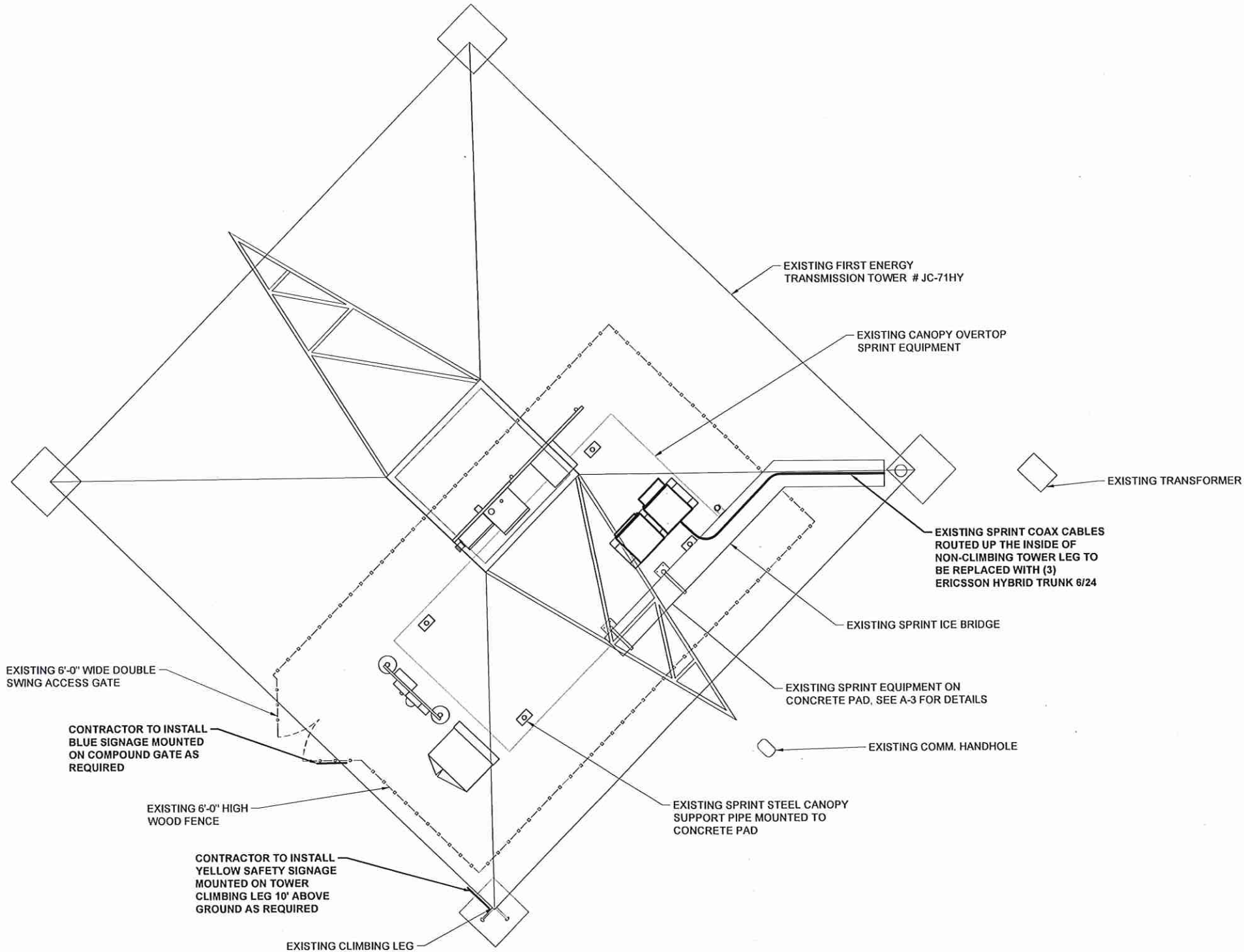
PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
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SHEET TITLE:

OVERALL SITE PLAN

SCALE:
AS NOTED

PROJECT NUMBER: 55895
SHEET NUMBER: A-1A



SITE PLAN
SCALE: 1" = 7.5'

1



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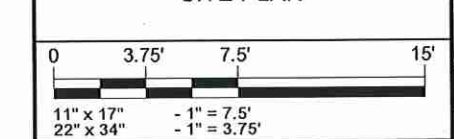
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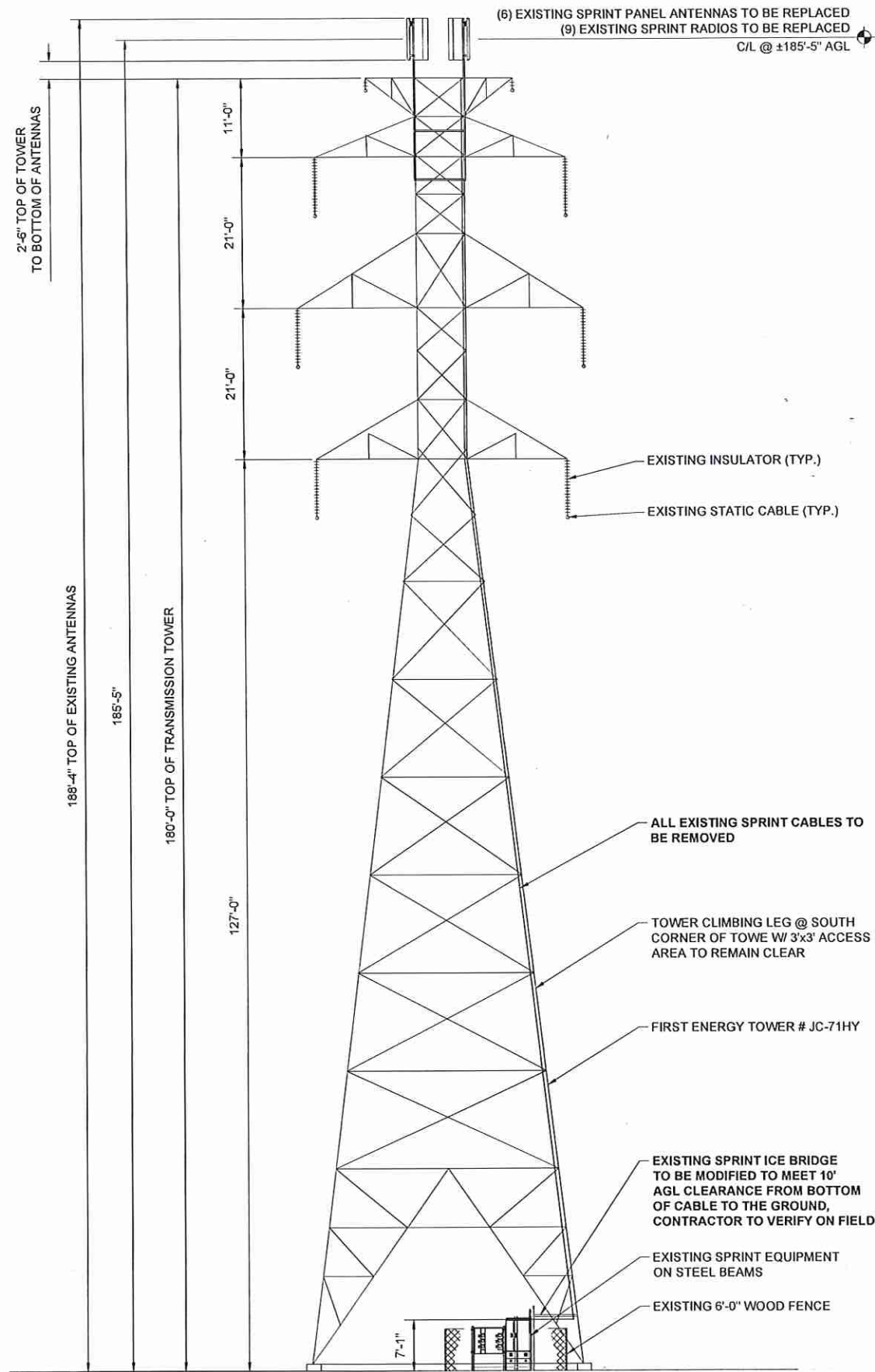
PROJECT TITLE:
**NJ01221A
(NY54XC668)**

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
SITE PLAN



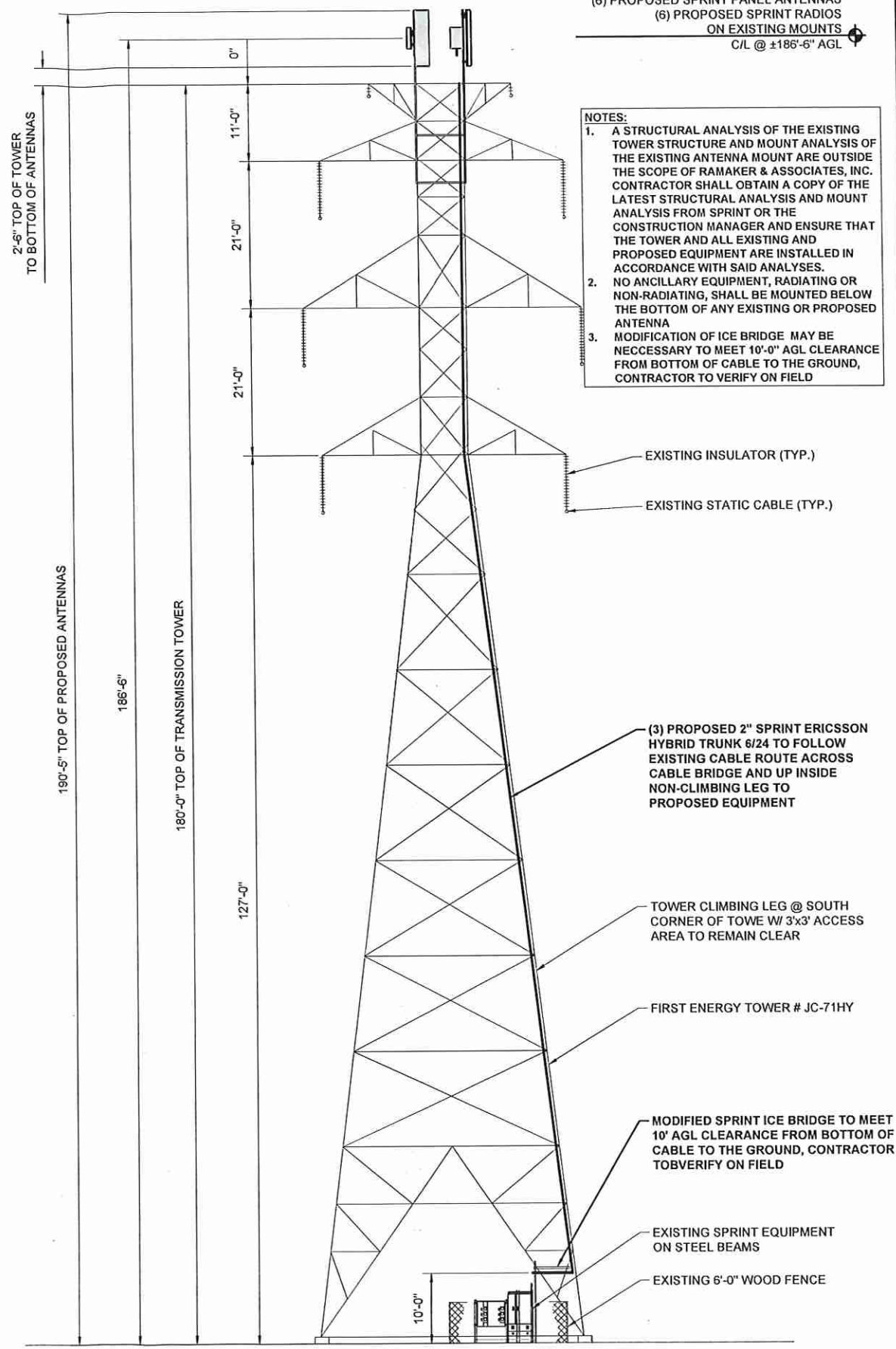
PROJECT NUMBER 55895
SHEET NUMBER A-1B



EXISTING TOWER ELEVATION

SCALE: 1" = 20'

1



PROPOSED TOWER ELEVATION

SCALE: 1" = 20'

2



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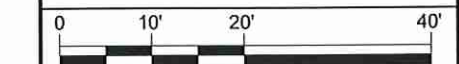
PROJECT TITLE:

NJ01221A
(NY54XC668)

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:

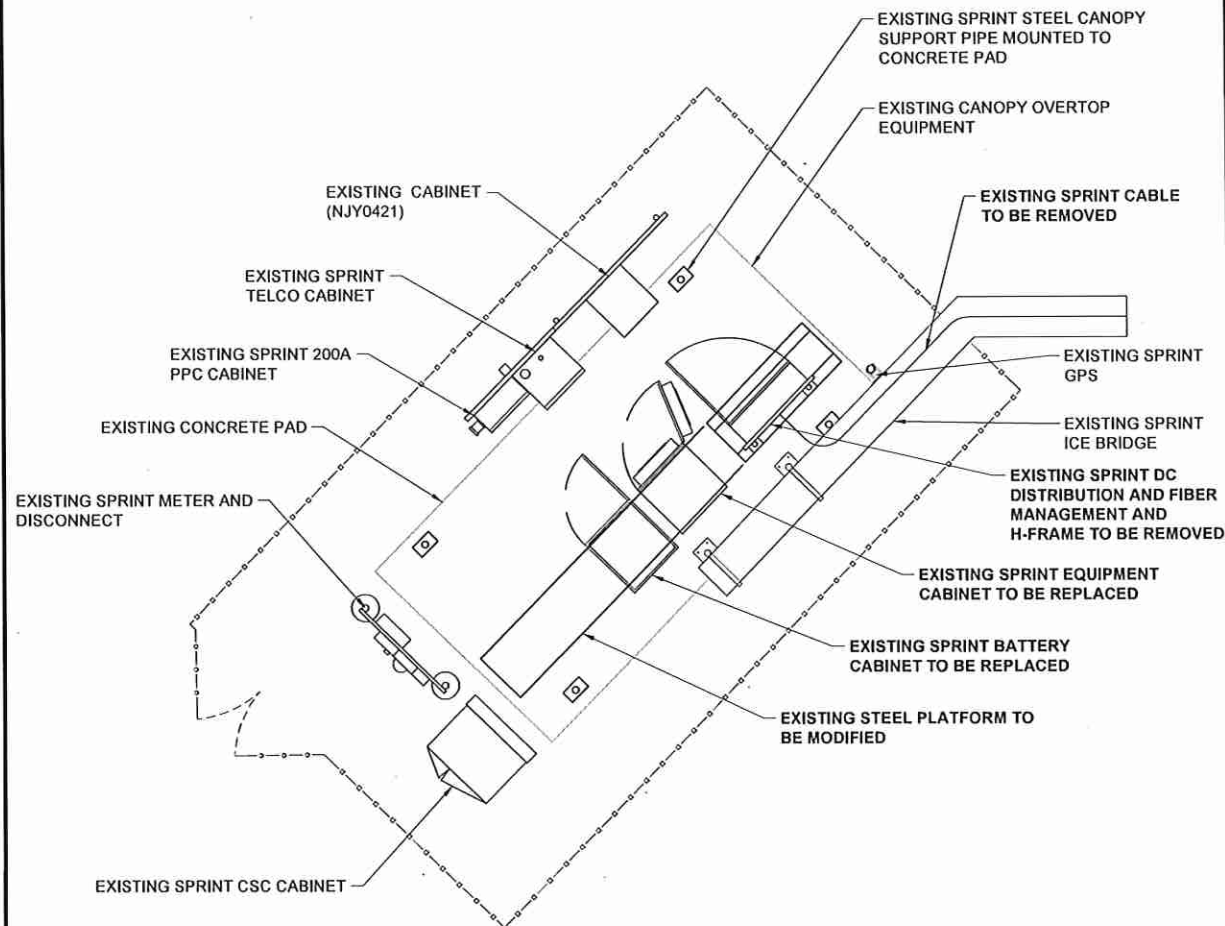
ELEVATIONS



11" x 17" - 1" = 20'
22" x 34" - 1" = 10'

PROJECT NUMBER 55895

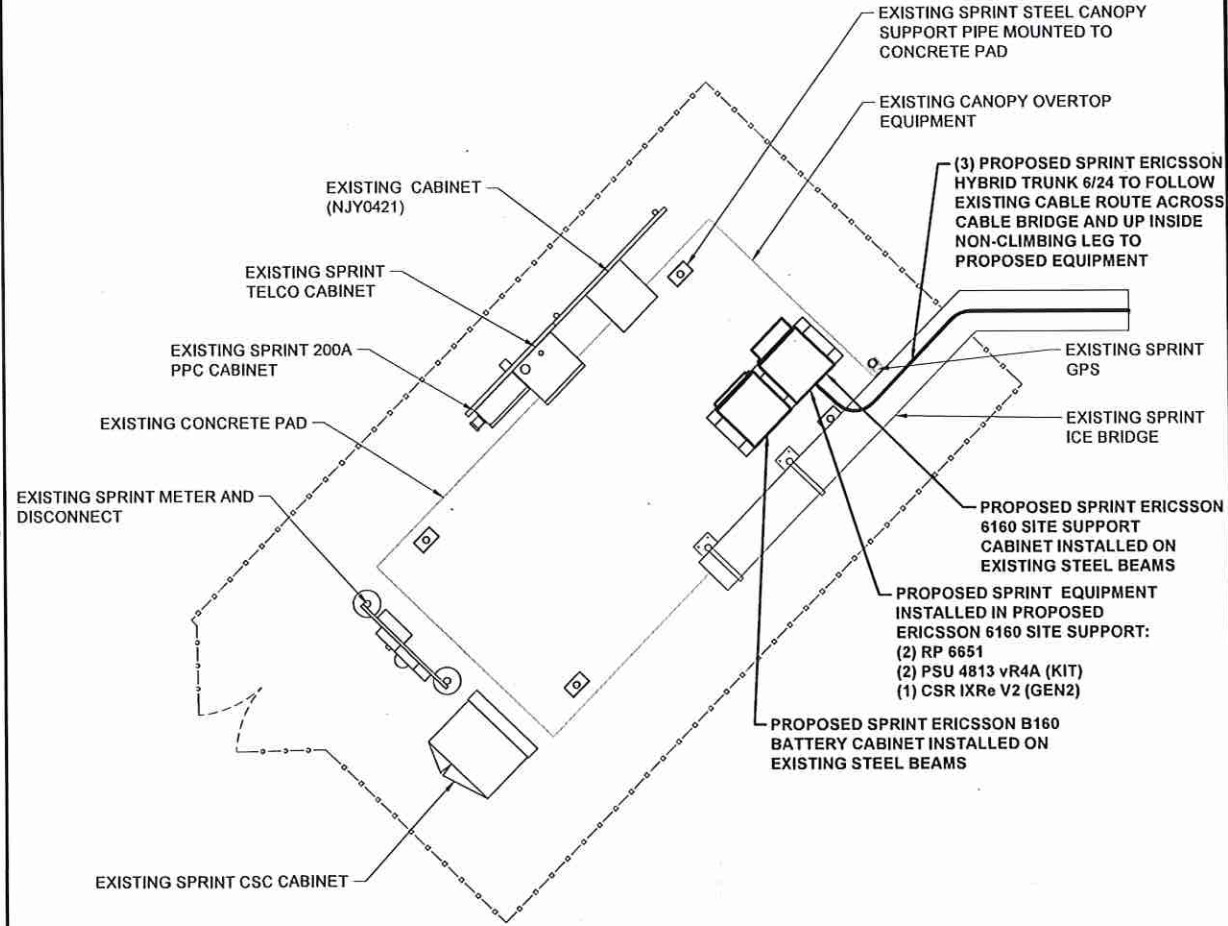
SHEET NUMBER A-2



EXISTING EQUIPMENT PLAN

SCALE: 1" = 7.5'

1



PROPOSED EQUIPMENT PLAN

SCALE: 1" = 7.5'

2



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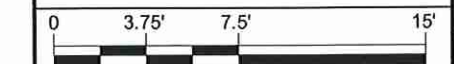
PROJECT TITLE:

NJ01221A
(NY54XC668)

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:

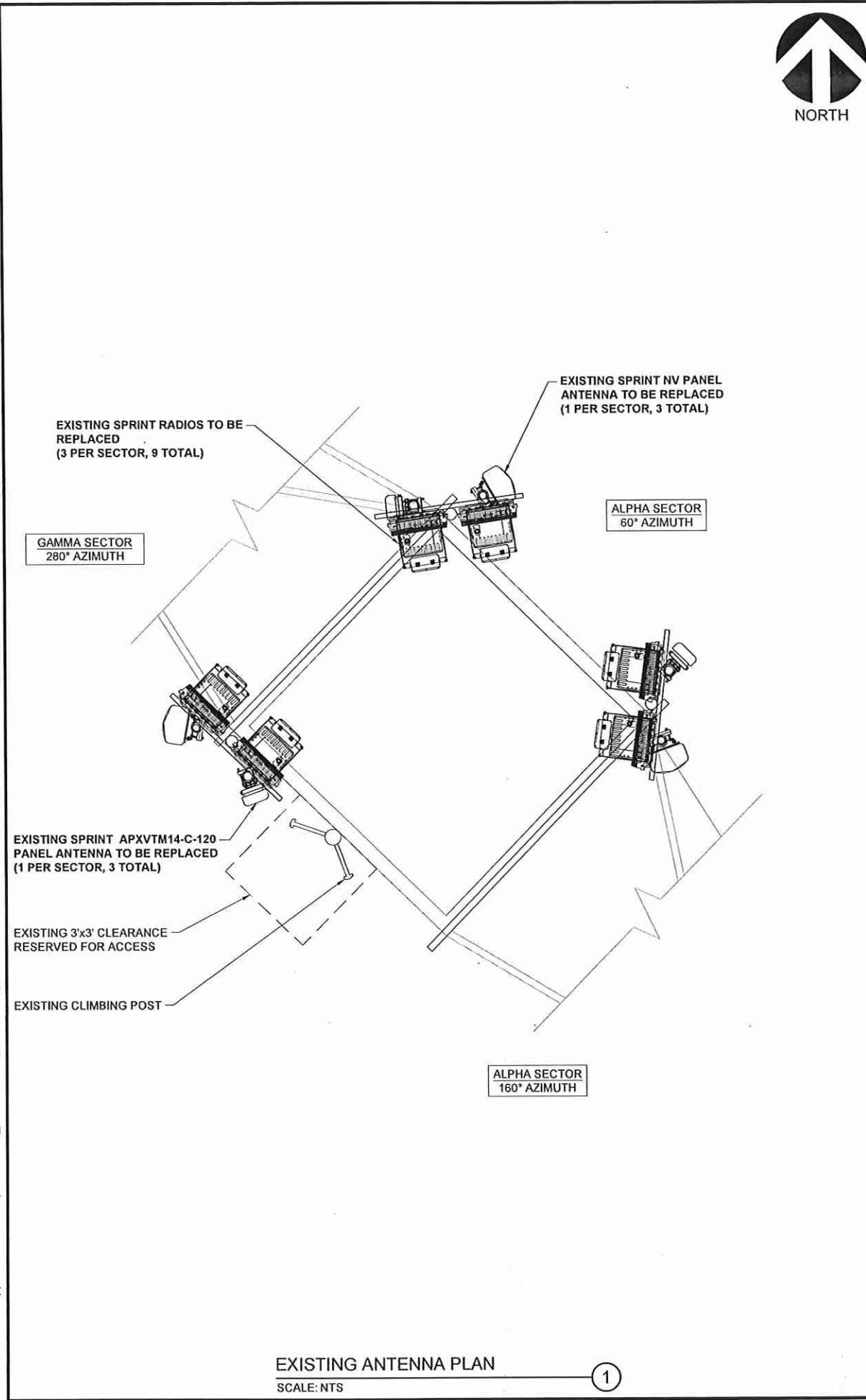
EQUIPMENT PLAN



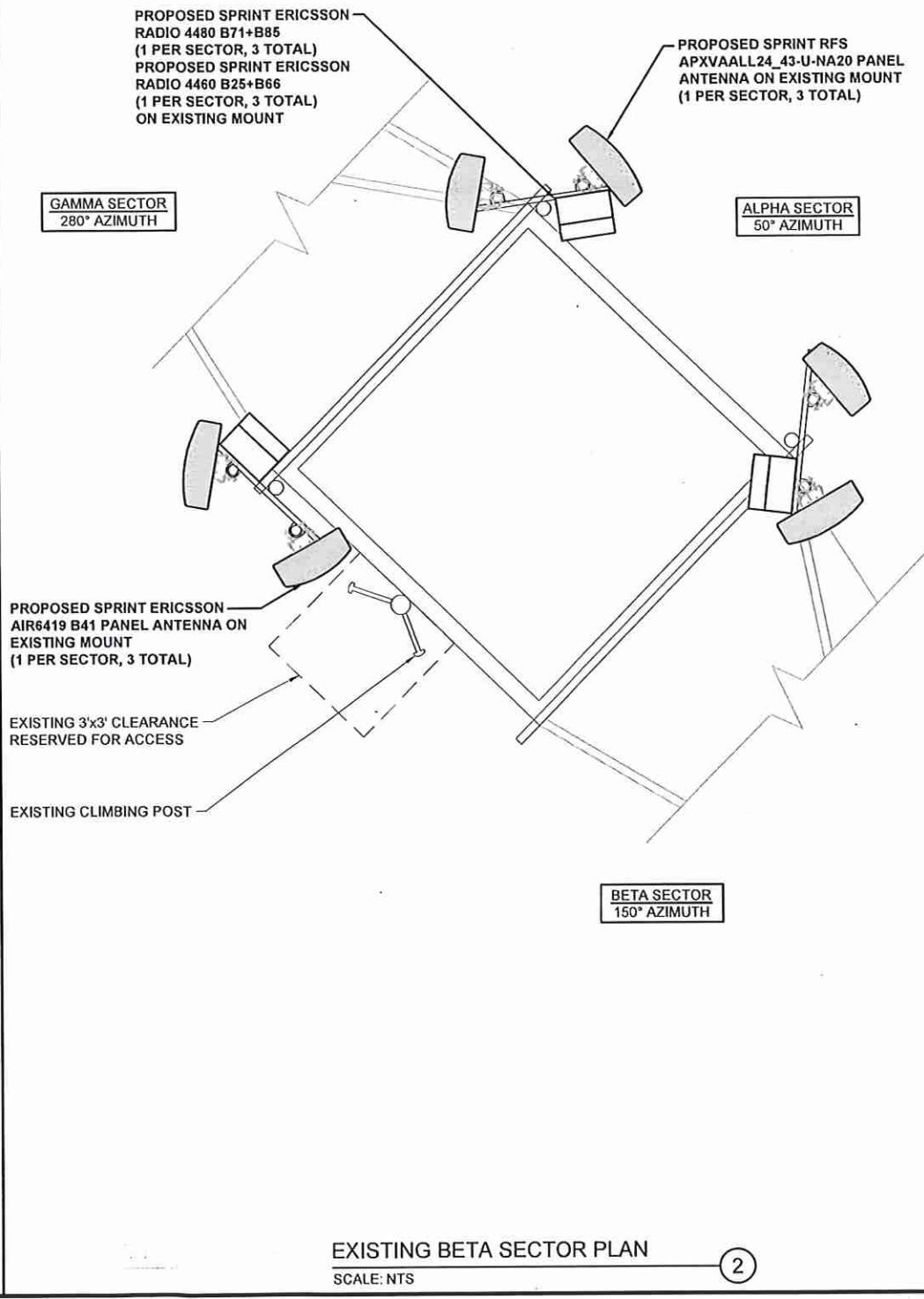
11" x 17" - 1" = 7.5'
22" x 34" - 1" = 3.75'

PROJECT NUMBER 55895

SHEET NUMBER A-3



NOTE:
A STRUCTURAL ANALYSIS OF THE EXISTING TOWER STRUCTURE AND MOUNT ANALYSIS OF THE EXISTING ANTENNA MOUNT ARE OUTSIDE THE SCOPE OF RAMAKER & ASSOCIATES, INC. CONTRACTOR SHALL OBTAIN A COPY OF THE LATEST STRUCTURAL ANALYSIS AND MOUNT ANALYSIS FROM SPRINT OR THE CONSTRUCTION MANAGER AND ENSURE THAT THE TOWER AND ALL EXISTING AND PROPOSED EQUIPMENT ARE INSTALLED IN ACCORDANCE WITH SAID ANALYSES.



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PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
ANTENNA LAYOUTS

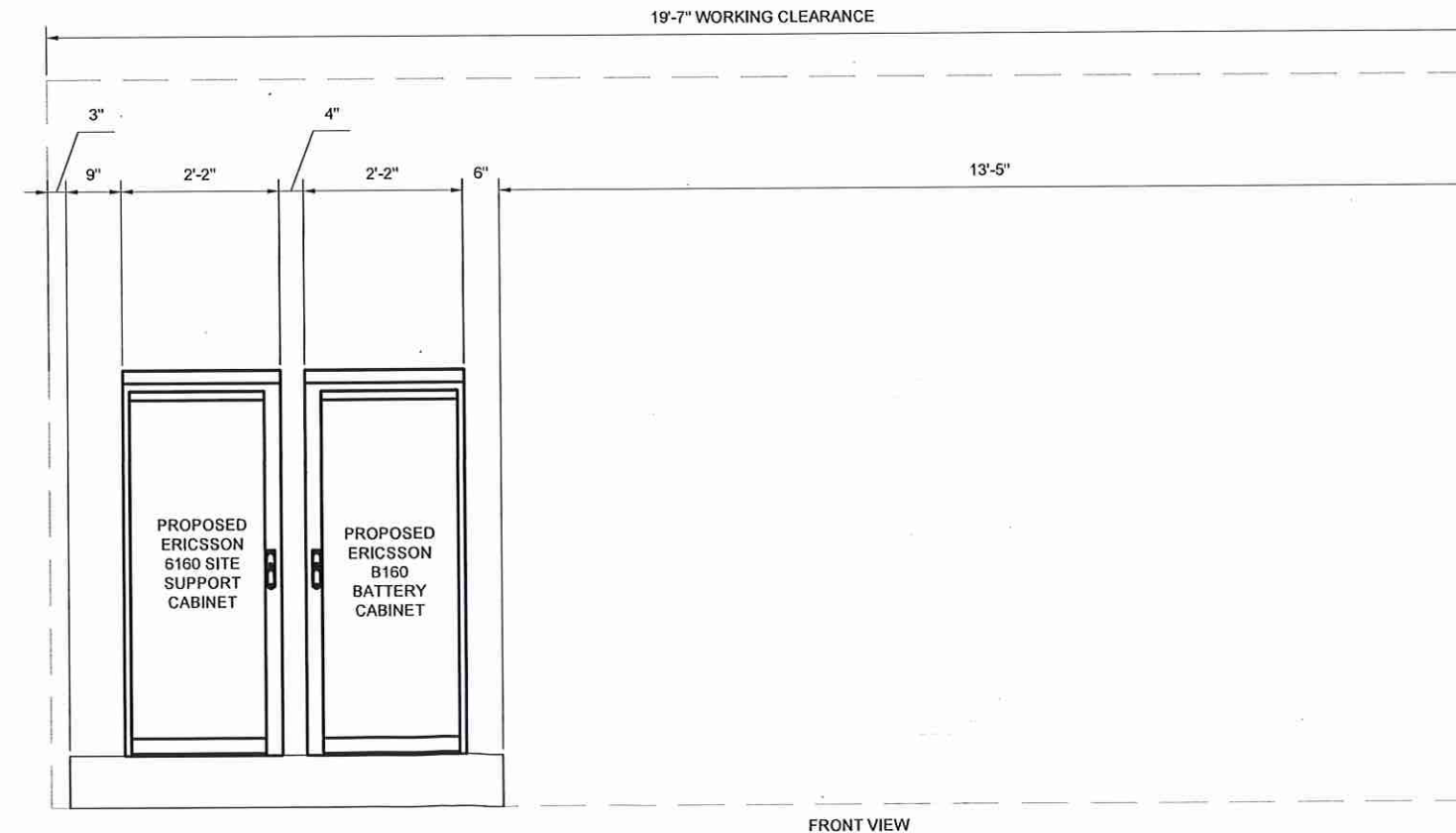
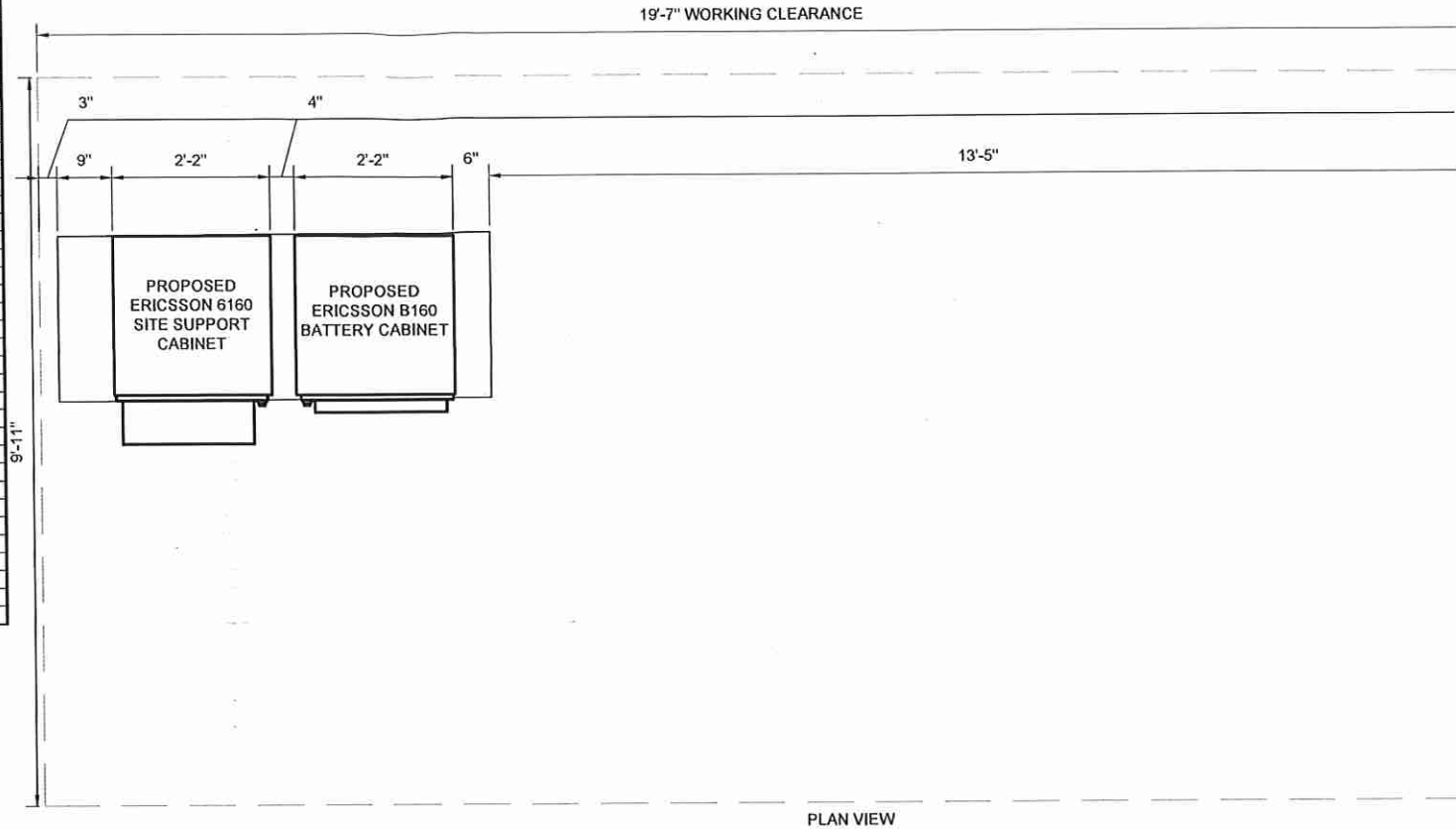
SCALE: NONE

PROJECT NUMBER 55895
SHEET NUMBER A-4

ERICSSON ANCHOR SITE W/ ENCLOSURE 6160				
SKU	OEM PN	DESCRIPTION	QUANTITY	COMMENTS
ENCLOSURE 6160 BASELINE BOM				
33953	UT6160_ENCL_AC	ENCLOSURE 6160 AC 150 NO BR/RADIO NO GPS	1	
33954	UT6160_BATT CAB	ENCLOSURE 6160 BATTERY CABINET NO BATTERY	1	
14502	NSB 150FT RED	12 Volt 150Ah-PLATE LEAD STRING OF 4	3	ORDERED BY MARKET
33973	BM1501450/1	RECTIFIER, 3.5kW	4	
N/A	SKA1148381/1	DUMMY RECTIFIER PLATE	5	
33974	NFS899001/010	DC CIRCUIT BREAKER KIT W/ ALARM 10A	5	
33975	NFS899001/030	DC CIRCUIT BREAKER KIT W/ ALARM 30A	11	
33976	NFS899001/050	DC CIRCUIT BREAKER KIT W/ ALARM 50A	3	
N/A	NTB1010537/1	FIBER OPTIC STORAGE UNIT	1	
N/A	SXK1251457/1	SPD DIN HOLDER		
TBD	KET109709/2	TEMPERATURE SENSOR		
34034	NTB1010068/23	1x30A SPD + 1x CABLE TO CONNECT TO 30A CB	11	
34033	NTB1010068/24	1x50A SPD + 1x CABLE TO CONNECT TO 50A CB	6	
ENCLOSURE 6160 BASELINE BOM				
TBD	NTB1010697/01	B160 HEATER KIT	1	KIT OF 3
TBD	TFK90162/4	BATTERY DC POWER CABLE 12M	1	BATTERY POWER CABLE TO 300A BREAKER
TBD	NFS899001/020	20a CB W/ ALARM	1	FOR 6160, B160 SIDE IS PREINSTALLED
TBD	TFL492324/10m	HEATER, FAN AND LAMP POWER 10M, 10AWG	1	FROM 6160 POWER TO 6160
TBD	TPA750110/15m	ALARM SIGNAL CABLE	1	FROM ALARM BLOCK TO 6160 ALARM OVP
INTERNAL CABINET COMPONENTS				
33024	RDH10265/2	SFP-10G FOR AIR 32 ON DUS	18	
33659	KDV127621/11	BB6630	6	5 FOR B41 L/N
33973	BM1501450/1	3.5 KW RECTIFIER		4 INCLUDED MORE NEEDED FOR SITE REQUIREMENTS
33974	NFS 899 001/015	6160 10 A BREAKER		5 INCLUDED IN 6160 BOM ADDITIONAL AS PER SITE REQUIREMENTS
33975	NFS 899001/25	6160 30A BREAKER		11 INCLUDED IN 6160 BOM ADDITIONAL AS PER SITE REQUIREMENTS
33976	NFS 899001/040	6160 50 A BREAKER		6 INCLUDED IN 6160 BOM ADDITIONAL AS PER SITE REQUIREMENTS
34034	NTB1010068/23	1x30A SPD + 1x CABLE TO CONNECT TO 30A CB		9 INCLUDED IN 6160 BOM ADDITIONAL AS PER SITE REQUIREMENTS
34033	NTB1010068/24	1x50A SPD + 1x CABLE TO CONNECT TO 50A CB		9 INCLUDED IN 6160 BOM ADDITIONAL AS PER SITE REQUIREMENTS
TBD	NTB 101 0537/1	FIBER OPTIC STORAGE UNIT		1 INCL IN 6160 BOM MORE MAY BE REQUIRED BASED ON HYBRID COUNT
33688	RPM77701/1300	EC BUS CABLE, BB-SHU, 1.3M	6	
33689	RPM77701/1600	EC BUS CABLE BB-SHU 1.6M	6	
31441	3HE00062CB	SFP-GIGE TX SFP COPPER MOD-RJ45 RoHS	6	
TBD	RPM 777 050/XXXX	POWER CABLE BB TO POWER	6	THIS IS JUST FOR B41 HW

BOM ORDERING CHART
SCALE: NTS

1



EQUIPMENT CABINET CONFIGURATION
SCALE: NTS

2

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(NY54XC668)**

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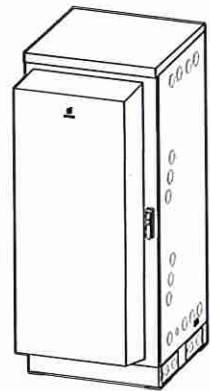
SHEET TITLE:
**EQUIPMENT CABINET
CONFIGURATION**

SCALE: NONE

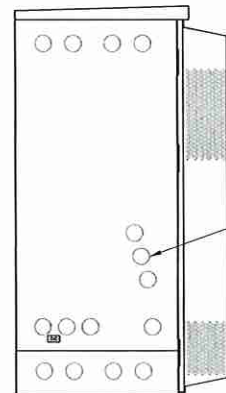
PROJECT NUMBER	55895
SHEET NUMBER	A-5

MANUFACTURER: ERICSSON SITE SUPPORT CABINET
MODEL: 6160
SKU: 33953
DIMENSIONS: 25.6"x33.5"x63.0"
WEIGHT: 295 LBS WITHOUT EQUIPMENT

- NOTE:
1. CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS
 2. CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING

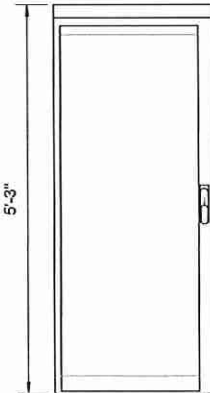


ISO VIEW

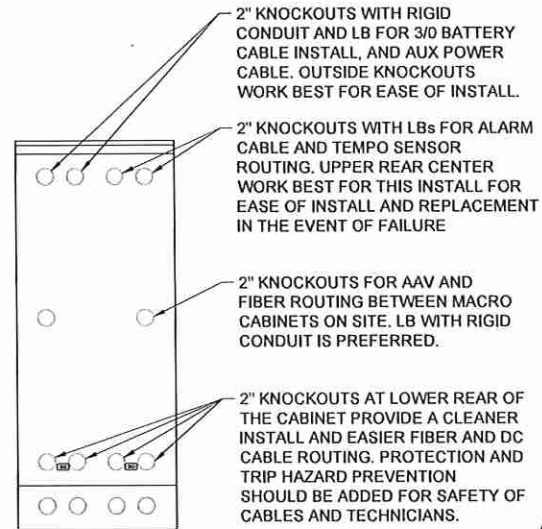


LEFT VIEW

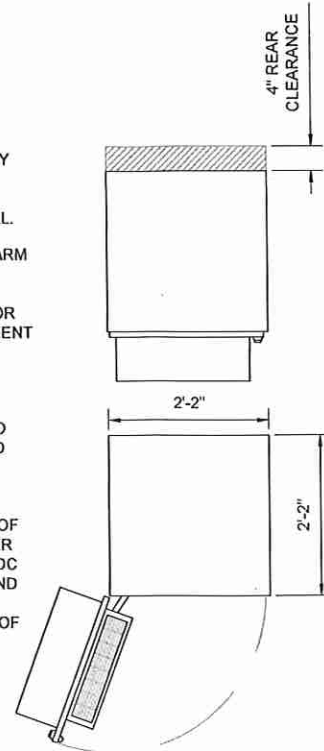
2" KNOCKOUT ON LEFT HAND SIDE OF CABINET USED AC POWER, WITH RIGID CONDUIT AND LB. PENETRATION IS DIRECTLY BELOW ACCU



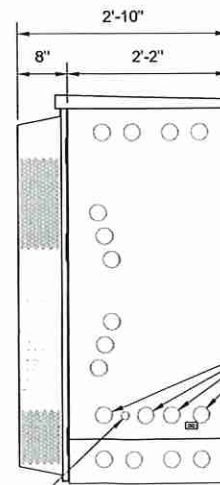
FRONT VIEW



REAR VIEW

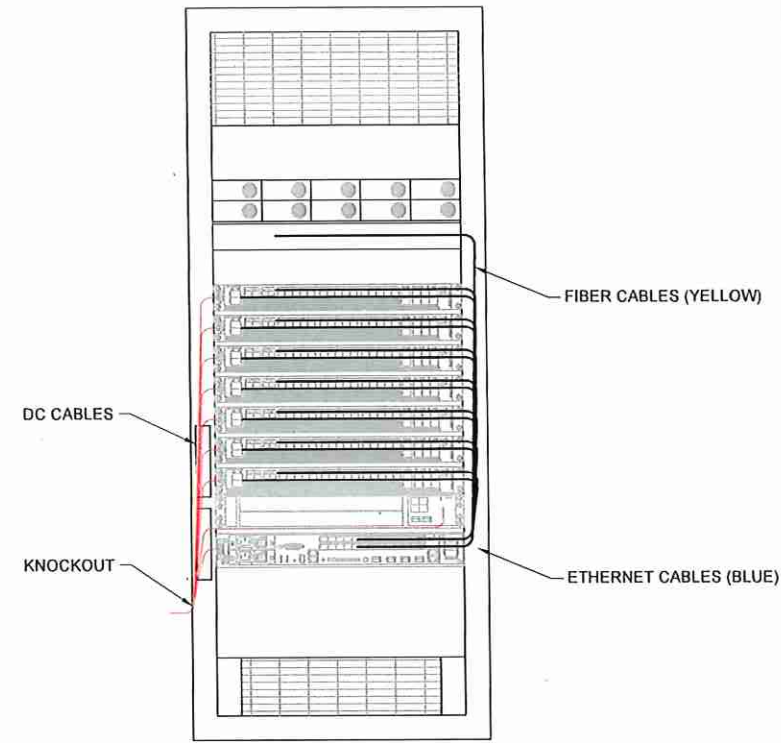


PLAN VIEW

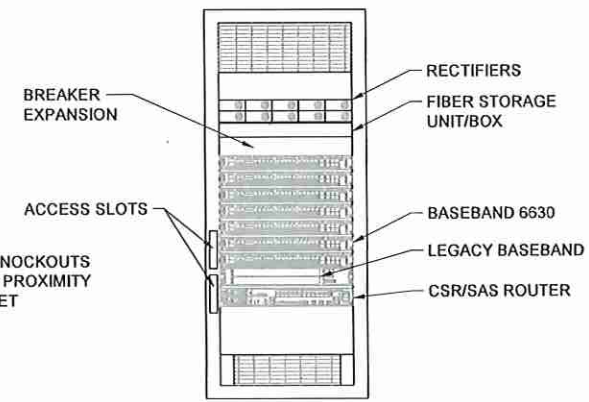


RIGHT VIEW

DEDICATED 1" FOR GNSS/GPS KNOCKOUT ON RIGHT HAND SIDE OF THE CABINET, RECOMMEND USING LL, RATHER THAN LB OR 90 DUE TO CLOSE PROXIMITY TO B160 BATTERY CABINET. 4" RIGID OR FLEX CONDUIT MAY BE USED



INTERNAL ROUTING



FRONT VIEW (OPEN)

ERICSSON 6160 SITE SUPPORT
CABINET - SKU #33953

SCALE: NTS

①

Sprint  T-Mobile 

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Transcend Wireless 

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MARK	DATE	DESCRIPTION
2	12/01/22	REVISED TO INCLUDE PARCEL MAP
1	05/03/22	REVISED PER LL COMMENTS
0	05/25/22	ISSUED AS FINAL
ISSUE PHASE FINAL DATE ISSUED 05/25/2022		

PROJECT TITLE:

NJ01221A
(NY54XC668)

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:

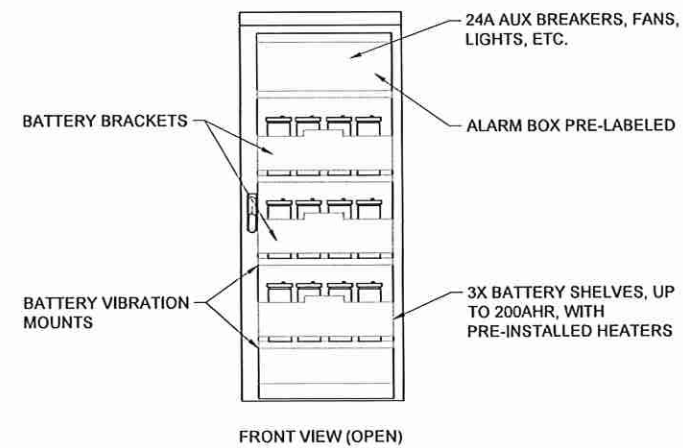
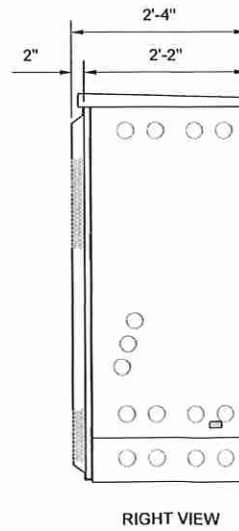
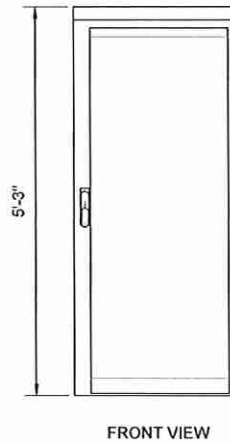
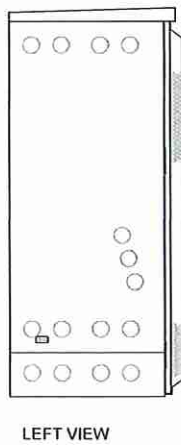
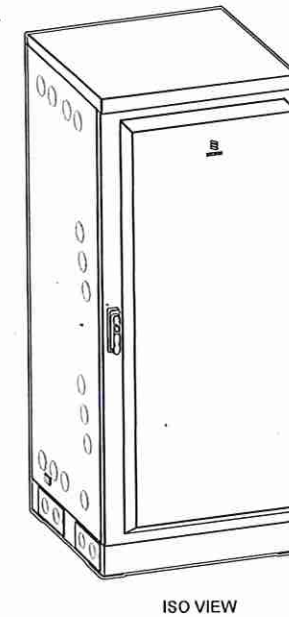
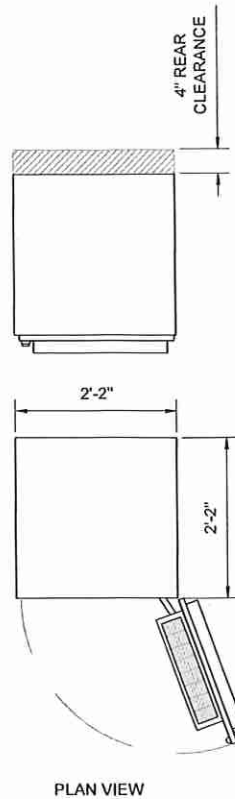
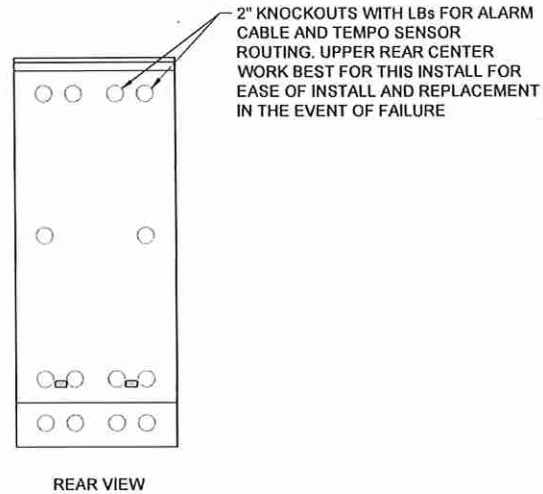
EQUIPMENT SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 55895
SHEET NUMBER A-6

MANUFACTURER: ERICSSON BATTERY CABINET
MODEL: B160
SKU: 33954
DIMENSIONS: 25.6"x33.5"x63.0"
WEIGHT: 295 LBS WITHOUT EQUIPMENT

- NOTE:
1. CORRECT KNOCKOUT TOOL REQUIRED FOR PUNCHING KNOCKOUTS. DO NOT DRILL KNOCKOUTS
 2. CONDUIT MUST BE PROPERLY SECURED TO PREVENT DAMAGE TO CABINETS AND/OR CABLING



ERICSSON B160 BATTERY CABINET -
SKU #33954
SCALE: NTS

1

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ISSUE PHASE	FINAL	DATE ISSUED 05/25/2022

PROJECT TITLE:
**NJ01221A
(NY54XC668)**

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
EQUIPMENT SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER 55895
SHEET NUMBER A-7

MANUFACTURER: RFS
MODEL: APXVAALL24_43-U-NA20
SKU: TBD
DIMENSIONS: 95.9"x24"x8.5"
WEIGHT: 149.9 LBS
FREQUENCY: REFER TO RFDS SHEET



ANTENNA SPECIFICATION

SCALE: NTS

1

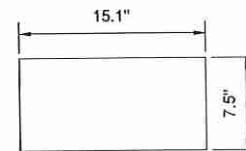
MANUFACTURER: ERICSSON
MODEL: AIR6419 B41
SKU: TBD
DIMENSIONS: 36.3"x20.9"x9.0"
WEIGHT: 83.3 LBS
FREQUENCY: REFER TO RFDS SHEET



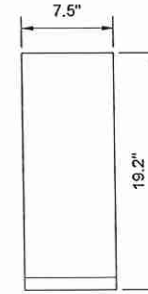
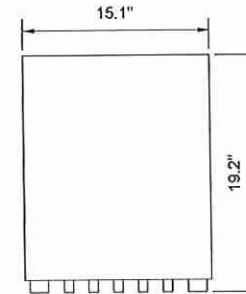
ANTENNA SPECIFICATION

SCALE: NTS

2



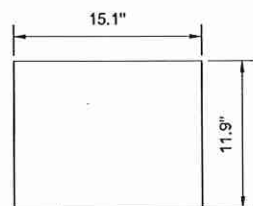
MANUFACTURER: ERICSSON
MODEL #: RADIO 4480 B71+B85
SKU: TBD
DIMENSIONS: 19.2"x15.1"x7.5"
WEIGHT: ±92.6 LBS.
FREQUENCY: REFER TO RFDS SHEET



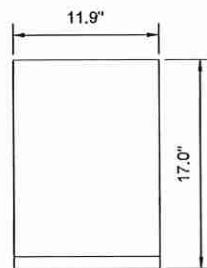
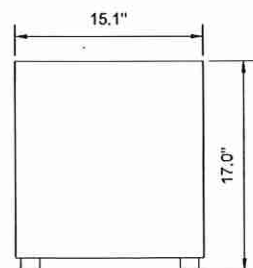
RADIO SPECIFICATION

SCALE: NTS

3



MANUFACTURER: ERICSSON
MODEL #: RADIO 4460 B25+B66
SKU: TBD
DIMENSIONS: 15.1"x17.0"x11.9"
WEIGHT: ±104.0 LBS.
FREQUENCY: REFER TO RFDS SHEET



ANTENNA SPECIFICATION

SCALE: NTS

4

DETAIL NOT USED

SCALE: NTS

5



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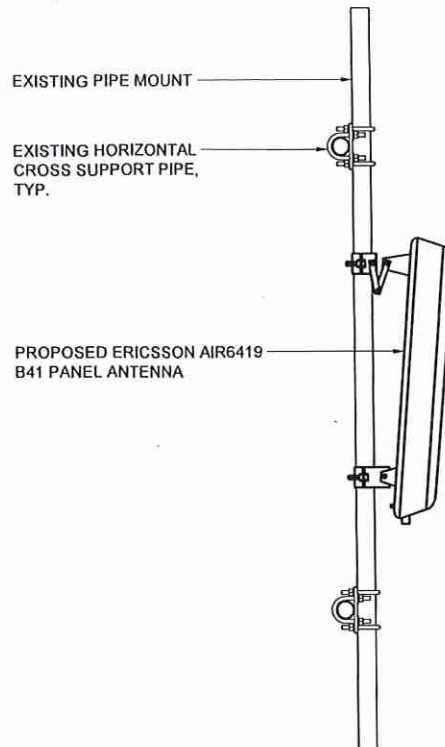
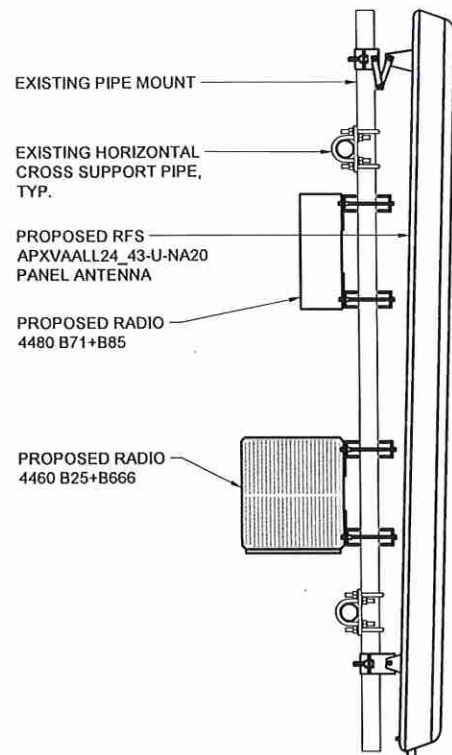
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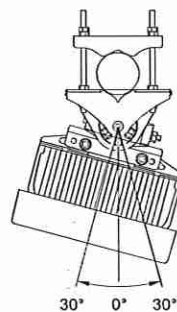
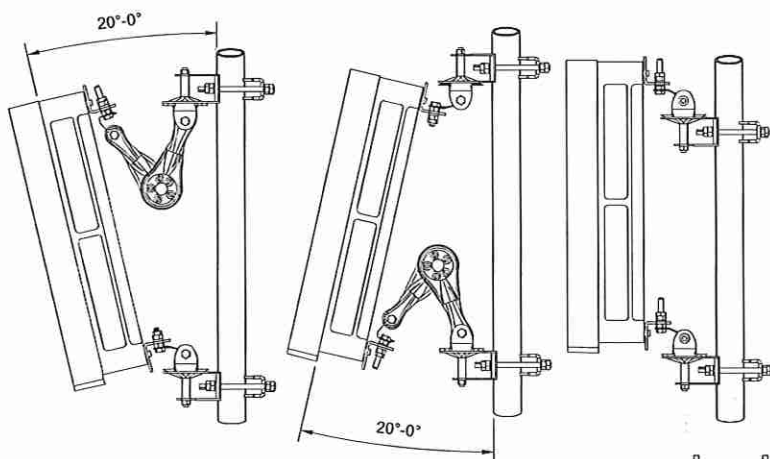
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MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED 05/25/2022
PHASE		
PROJECT TITLE:		
NJ01221A (NY54XC668)		
PROJECT INFORMATION:		
318 GARRISON ROAD PHILLIPSBURG, NJ 08865 WARREN COUNTY		
SHEET TITLE:		
EQUIPMENT SPECIFICATIONS		
SCALE: NONE		
PROJECT NUMBER	55895	
SHEET NUMBER	A-8	



ANTENNA & RRU MOUNTING DETAILS

SCALE: NTS

1



QTY	DESCRIPTION
1	ADAPTER, POLE, LOWER
1	BRACKET, DOWNTILT, POLE
1	BRACKET, DOWNTILT, ANTENNA
6	1/2 X 1 HEX HEAD BOLT
6	1/2 SPLIT WASHER
2	5/16 X 1 HEX HEAD BOLT
2	5/16 SPLIT WASHER
4	1/2" THREADED ROD
8	1/2" SPLIT WASHER
12	1/2" NUT

ANTENNA MOUNTING DETAIL

SCALE: NTS

2

DETAIL NOT USED

SCALE: NTS

3



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ISSUE PHASE	FINAL	DATE ISSUED 05/25/2022

PROJECT TITLE:

NJ01221A
(NY54XC668)

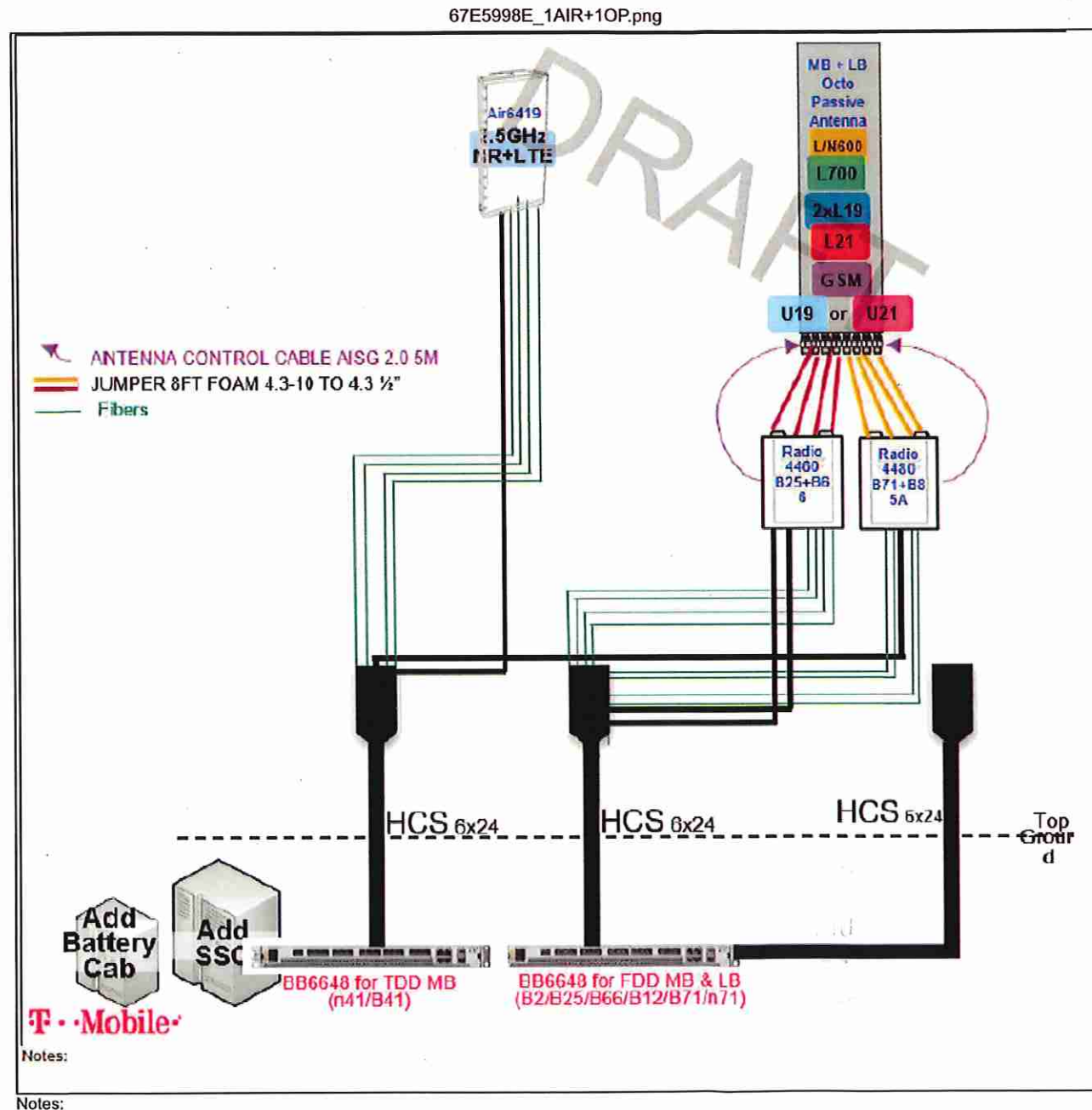
PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:

EQUIPMENT SPECIFICATIONS

SCALE: NONE

PROJECT NUMBER	55895
SHEET NUMBER	A-9



PLUMBING DIAGRAM
SCALE: NTS

1



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PROJECT TITLE:
**NJ01221A
(NY54XC668)**

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
RF CONFIGURATION

SCALE: NONE

PROJECT NUMBER	55895
SHEET NUMBER	A-10

RF DESIGN										
SECTOR	BAND	ANTENNA MODEL	ANTENNA RAD CENTER	AZIMUTH	ANTENNA DOWN TILT		RADIOS	TMAS / DIPLEXERS / SECTOR EQUIPMENT	CABLE FEED LINES	CABLE LENGTH
					ELECTRICAL DT	MECHANICAL DT				
ALPHA	N600 / L700 / L600 / L2100 / L1900	(P) APXVAALL24_43-U-NA20	186'-6"	50°	8°/8°/4°/4°	0°	(P) (1) RADIO 4480 B71 + B85	-	(P) (1) HYBRID TRUNK 6/24	±225'
						(P) (1) RADIO 4460 B25 + B66				
	L2500 / N2500	(P) AIR6419 B41	186'-6"	50°	4°/4°	0°	-	-		
BETA	N600 / L700 / L600 / L2100 / L1900	(P) APXVAALL24_43-U-NA20	186'-6"	150°	8°/8°/4°/4°	0°	(P) (1) RADIO 4480 B71 + B85	-	(P) (1) HYBRID TRUNK 6/24	±225'
						(P) (1) RADIO 4460 B25 + B66				
	L2500 / N2500	(P) AIR6419 B41	186'-6"	150°	4°/4°	0°	-	-		
GAMMA	N600 / L700 / L600 / L2100 / L1900	(P) APXVAALL24_43-U-NA20	186'-6"	280°	8°/8°/4°/4°	0°	(P) (1) RADIO 4480 B71 + B85	-	(P) (1) HYBRID TRUNK 6/24	±225'
						(P) (1) RADIO 4460 B25 + B66				
	L2500 / N2500	(P) AIR6419 B41	186'-6"	280°	4°/4°	0°	-	-		

RF DESIGN TABLE
SCALE: NTS

1



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PROJECT TITLE:
**NJ01221A
(NY54XC668)**










PROJECT INFORMATION:
318 GARRISON ROAD
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WARREN COUNTY

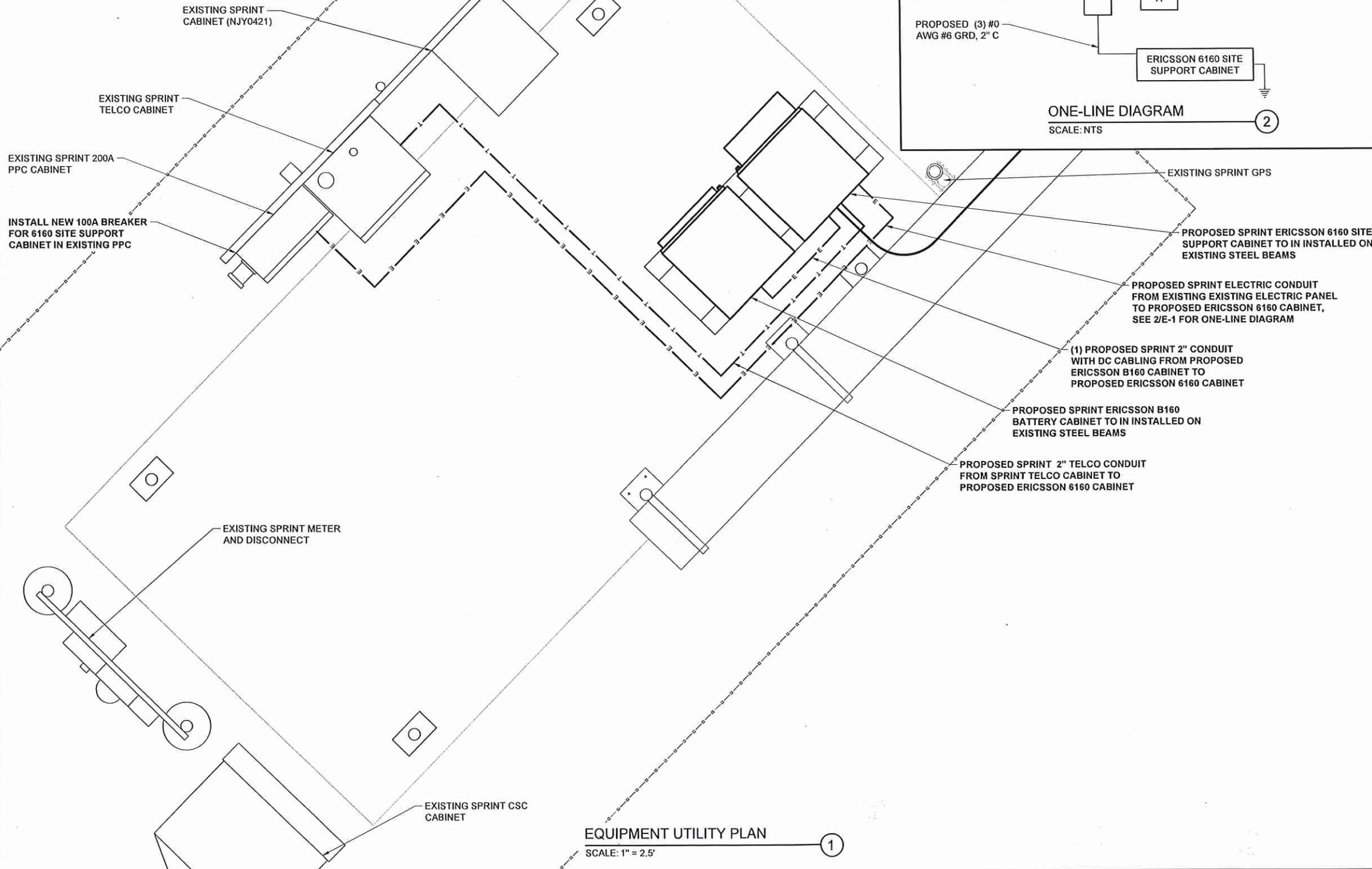
SHEET TITLE:
RF DESIGN TABLE

SCALE: NONE

PROJECT NUMBER	55895
SHEET NUMBER	A-11

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LEGEND:	
	UTILITY POLE
	EASEMENT
	PROPOSED ELECTRIC
	PROPOSED TELCO
	PROPOSED FIBER
	EXISTING FIBER
	OVERHEAD ELECTRIC
	ELECTRIC LINE
	TELEPHONE LINE



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PROJECT TITLE:
**NJ01221A
(NY54XC668)**

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
UTILITY DETAILS

SCALE:
AS NOTED

PROJECT NUMBER	55895
SHEET NUMBER	E-1

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GROUNDING SPECIFICATIONS:

- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR INTENDED USE.
- GROUNDING CONNECTIONS SHALL BE EXOTHERMIC (CADWELD) TO ANTENNA MASTS, FENCE POSTS, AND GROUND RODS UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINE METAL. WHERE GROUND WIRES ARE CADWELD TO GALVANIZED SURFACES. SPRAY CADWELD WITH GALVANIZING PAINT. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION/MECHANICAL FITTINGS.
- ROUTE GROUNDING CONDUCTORS ALONG THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 8" RADIUS.
- WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING, INSTALL WIRE IN " PVC SLEEVE, FROM 1'-0" MIN. ABOVE GRADE AND SEAL TOP WITH SILICONE MATERIAL. GROUNDING CONDUCTORS SHALL BE RUN THROUGH " PVC SLEEVE WHERE ROUTED THROUGH WALLS, FLOORS, AND CEILING AND/OR ABOVE EXTERIOR GRADE. ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
- SURFACE CONNECTIONS SHALL BE MADE TO BARE METAL. PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.
- GROUNDING WIRE CONNECTIONS SHALL BE 3-CRIMP C-TAP COMPRESSION TYPE. SPLIT BOLTS ARE NOT ACCEPTABLE.
- GROUND RODS SHALL BE COPPER CLAD STEEL 5/8" x10' SPACE NOT LESS THAN 10' O.C.
- CONNECTORS SHALL BE CRIMPED USING HYDRAULIC CRIMPING TOOLS.
- COPPER BUSES SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED
- COPPER WILL BE PERMITTED.
- HARDWARE (I.E. NUTS, BOLTS, WASHERS, ETC.) IS TO BE STAINLESS STEEL.
- THE ENTIRE SYSTEM SHALL BE SOLIDLY GROUNDED USING LOCKNUTS AND BONDING NUTS ON CONDUITS AND PROPERLY BONDED GROUND CONDUCTORS, RECEPTACLES AND EQUIPMENT BRANCH CIRCUITS SHALL BE GROUNDED WITH A FULL SIZED EQUIPMENT GROUNDING CONDUCTOR RUN IN THE CIRCUIT'S CONDUIT.
- INSTALL GROUND BUSHINGS ON ALL METALLIC CONDUITS AND BOND TO THE EQUIPMENT GROUND BUS IN THE PANEL BOARD.
- GROUND BARS (SECTOR, COLLECTOR, MASTER) SHALL BE MIN. BARE " x 4" COPPER AND LARGE ENOUGH TO ACCOMMODATE THE REQUIRED NUMBER OF GROUND CONNECTIONS. THE HARDWARE SECURING THE MGB SHALL ELECTRICALLY INSULATE THE MGB FROM ANY STRUCTURE TO WHICH IT IS FASTENED.
- APPLY THOMAS & BETSS KOPR-SHIELD OR APPROVED EQUIVALENT PRIOR TO MAKING MECHANICAL CONNECTIONS.
- SHALL BE MADE WITH STAINLESS STEEL BOLTS, NUTS AND LOCK WASHERS " DIAMETER MIN. WHERE GALVANIZING IS REMOVED FROM METAL IT SHALL BE PAINTED OR TOUCHED UP WITH 'GALVONOX' OR EQUAL.
- ALL TERMINATIONS AT EQUIPMENT ENCLOSURES, PANELS, FRAMES OF EQUIPMENT AND WHERE EXPOSED FOR GROUNDING
- CONDUCTOR TERMINATION SHALL BE PERFORMED UTILIZING TWO HOLE BOLTED TONGUE COMPRESSION TYPE WITH STAINLESS STEEL SELF-TAPPING SCREWS.
- ALL CLAMPS AND SUPPORTS USED TO SUPPORT THE GROUNDING SYSTEM CONDUCTOR AND PVC CONDUITS SHALL BE PVC TYPE (NON-CONDUCTIVE). DO NOT USE METAL BRACKETS OR SUPPORTS WHICH WOULD FORM A COMPLETE RING AROUND ANY GROUNDING CONDUCTOR.
- THE CONTRACTOR SHALL ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT RESISTANCE TO EARTH DOES NOT EXCEED 5.0 OHMS. PROVIDE A COPY OF TESTING REPORT, INCLUDING THE METHOD AND INSTRUMENTS USED TO VERIFY RESISTANCE TO SPRINT REPRESENTATIVE.
- COAX CABLE SHALL BE GROUNDED AT ANTENNA LEVEL WITHIN 5' OF ANTENNA. COAX WILL ADDITIONALLY BE GROUNDED AT THE BASE OF THE TOWER 18" BEFORE THE CABLE REACHES A HORIZONTAL PLANE. IF EQUIPMENT CABINET IS MORE THAN 15' FROM THE TOWER AN ADDITIONAL GROUND KIT WILL BE ADDED 24" BEFORE CABLE ENTERS CABINET.
- ALL COAX GROUND KITS WILL BE ANDREW 'COMPACT SURE GROUND' OR APPROVED EQUIVALENT.
- VERIFY THE GROUNDING CONTINUITY BETWEEN THE TOWER BASE AND THE NEW SPRINT CABINET GROUND BAR. CONTRACTOR SHALL ENSURE THAT ALL METALLIC OBJECTS WITHIN 6' FROM CABINET HAVE GROUNDING CONTINUITY. THE CONTRACTOR SHALL CORRECT ANY DEFECTS BE ADDING GROUNDING CONDUCTOR TO ENSURE CONTINUITY.22. GROUNDING CONDUCTORS SHALL BE COPPER ONLY. EITHER SOLID OR STRANDED CONDUCTORS ARE PERMITTED. ALL EXTERNAL BURIED CONDUCTORS MUST BE BARE. EQUIPMENT GROUND LEADS IN CABLE TRAYS MUST BE GREEN INSULATED.23. CONTRACTOR TO PROVIDE GROUND WIRES, BARS, AND CONNECTIONS AS SHOWN ON GROUNDING RISER DIAGRAM.
- METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS PER NEC AND SPRINT.
- CONNECTIONS TO THE GROUND BAR SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUSS ARE PERMITTED.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH NEC, SHALL BE FURNISHED AND INSTALLED WITH POWER CIRCUITS TO BTS EQUIPMENT.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. IN ALL CASES, BENDS SHALL BE MADE WITH A MINIMUM BEND RADIUS OF 8 INCHES.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH NEC.
- GROUND ALL RF EQUIPMENT INCLUDING BUT NOT LIMITED TO COAX, DIPLEXERS, SURGE ARRESTORS, TMA'S, ANTENNAS, AND ANTENNA MAST PER NEC AND SPRINT.

GENERAL NOTES:

- OBTAIN PERMITS AND PAY FEES RELATED TO ELECTRICAL WORK PERFORMED ON THIS PROJECT. DELIVER COPIES OF ALL PERMITS TO SPRINT.

- SCHEDULE AND ATTEND INSPECTIONS RELATED TO ELECTRICAL WORK REQUIRED BY JURISDICTION HAVING AUTHORITY. CORRECT AND PAY FOR ANY WORK REQUIRED TO PASS ANY FAILED INSPECTION.
- REDLINED AS-BUILTS ARE TO BE DELIVERED TO SPRINT REPRESENTATIVE.
- PROVIDE TWO COPIES OF OPERATION AND MAINTENANCE MANUALS IN THREE-RING BINDER.
- FURNISH AND INSTALL THE COMPLETE ELECTRICAL SYSTEM, TELCO SYSTEM, AND THE GROUNDING SYSTEM AS SHOWN ON THESE DRAWINGS.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE BUILDING CODES AND LOCAL ORDINANCES, INSTALLED IN A NEAT MANNER AND SHALL BE SUBJECT TO APPROVAL BY SPRINT.
- CONDUCT A PRE-CONSTRUCTION SITE VISIT AND VERIFY EXISTING SITE CONDITIONS AFFECTING THIS WORK. REPORT ANY OMISSIONS OR DISCREPANCIES FOR CLARIFICATION PRIOR TO THE START OF CONSTRUCTION.
- PROTECT ADJACENT STRUCTURES AND FINISHES FROM DAMAGE. REPAIR TO ORIGINAL CONDITION ANY DAMAGED AREA.
- REMOVE DEBRIS ON A DAILY BASIS. DEBRIS NOT REMOVED IN A TIMELY FASHION WILL BE REMOVED BY OTHERS AND THE RESPONSIBLE SUBCONTRACTOR SHALL BE CHARGED ACCORDINGLY. REMOVAL OF DEBRIS SHALL BE COORDINATED WITH THE SITE OWNERS REPRESENTATIVE. DEBRIS SHALL BE REMOVED FROM THE PROPERTY AND DISPOSED OF LEGALLY. USE OF THE PROPERTY'S DUMPSTER IS PROHIBITED.
- CONTRACTOR TO CONFIRM AVAILABLE CAPACITY AT EXISTING UTILITY PEDESTAL AND ADVISE ENGINEER OF SERVICE SIZE AND FAULT CURRENT LEVEL.
- IF PEDESTAL DOES NOT HAVE ADEQUATE CAPACITY, CONTRACTOR TO SUBMIT COST QUOTATION TO UPGRADE. UPON APPROVAL OF SUBMITTED COST QUOTATION, THE CONTRACTOR SHALL PROVIDE NEW SERVICE AND/OR UPGRADE SERVICE. FEEDERS AND EQUIPMENT/ELECTRODE GROUNDING CONDUCTORS SIZE ACCORDINGLY.
- CONTRACTOR SHALL VERIFY SEPARATION DIMENSION BETWEEN POWER COMPANY ELECTRICAL CONDUITS AND LP GAS PIPES AS PER UTILITY COMPANY. LOCAL CODES, NEC, NFPA, AND GAS TANK MANUFACTURER'S SPECIFICATION.
- CONTRACTOR SHALL VERIFY THAT THE TOTAL NUMBER OF SERVICE ENTRANCE DISCONNECTS IN THE EXISTING UTILITY COMPANY PEDESTAL MUST NOT EXCEED SIX. IF THE NEW SERVICE ADDED EXCEEDS THIS VALUE, CONTRACTOR MUST COORDINATE WITH THE UTILITY COMPANY AND AUTHORITY HAVING JURISDICTION. THE RUNNING OF AN ADDITIONAL EXCLUSIVE AND DEDICATED SERVICE LATERAL SET FOR THE NEW LOAD ADDED TO THE COMPOUND AS PER NEC ARTICLE 230-2(B).
- THE EQUIPMENT/PROTECTIONS MUST BE RATED FOR STANDARD AIC RATE HIGHER THAN INCOMING EQUIPMENT AND/OR UTILITY COMPANY AIC RATE.



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N.J. PROFESSIONAL ENGINEER #45690
COMPANY CERTIFICATE OF AUTHORIZATION
#24GA20109400, Exp. 04/30/2024

MARK	DATE	DESCRIPTION
2	12/01/22	REVISED TO INCLUDE PARCEL MAP
1	08/03/22	REVISED PER LL COMMENTS
0	05/25/22	ISSUED AS FINAL

ISSUE	FINAL	DATE	05/25/2022
PHASE		ISSUED	

PROJECT TITLE:

NJ01221A
(NY54XC668)

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

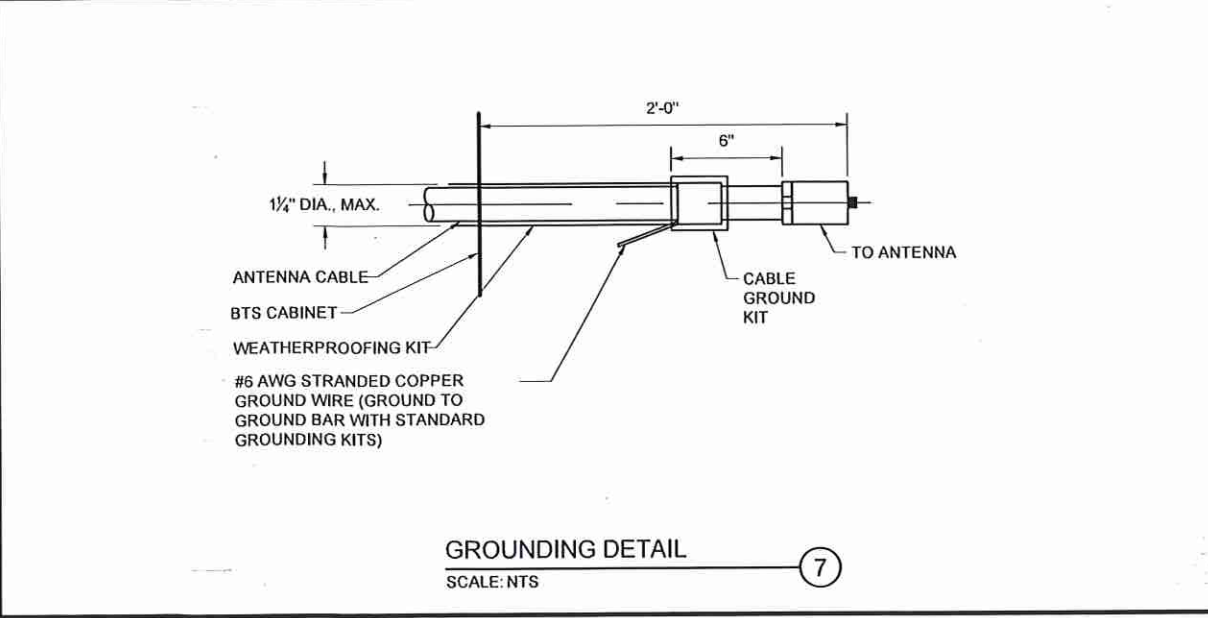
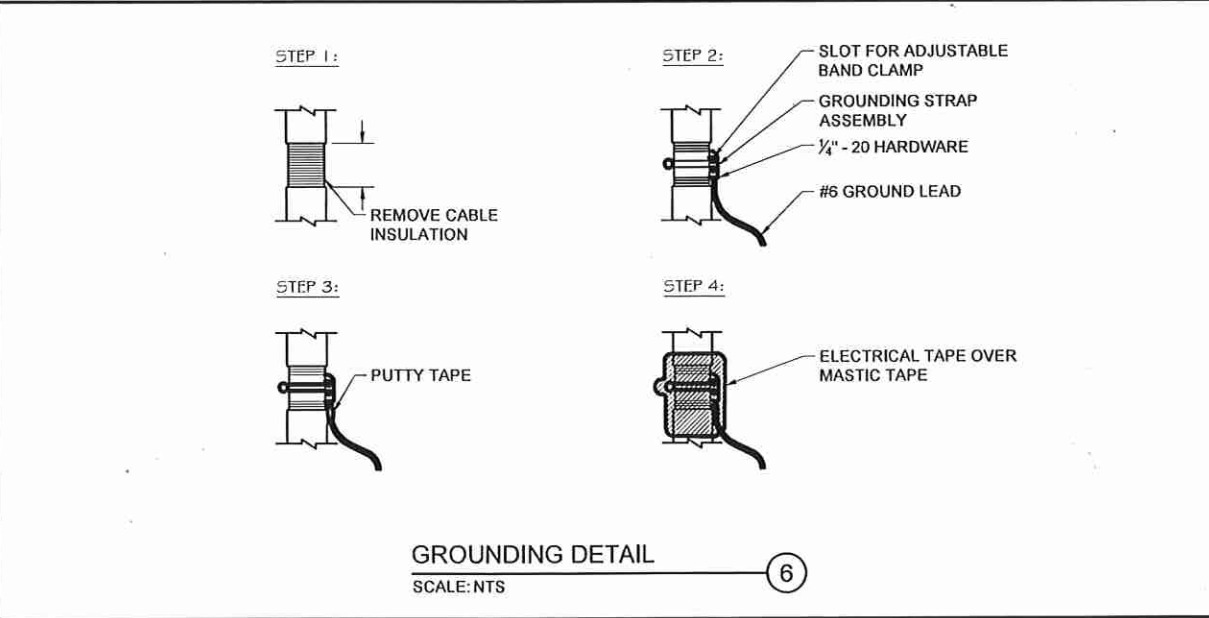
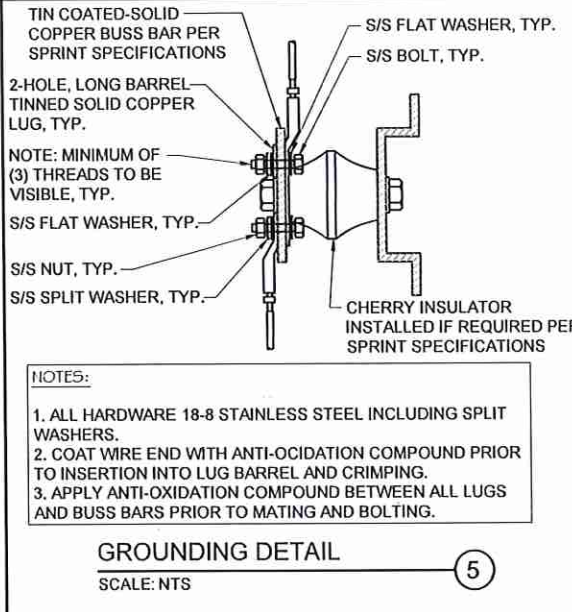
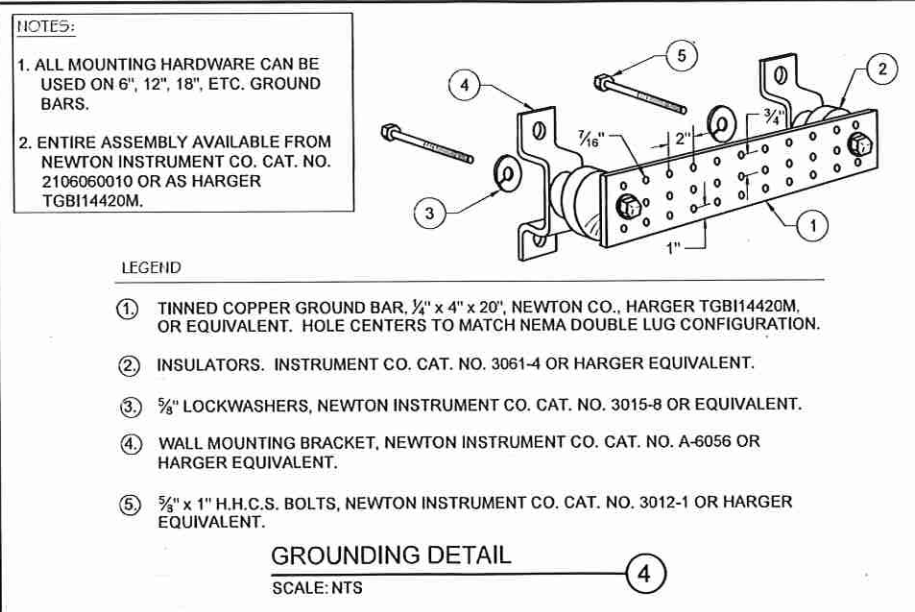
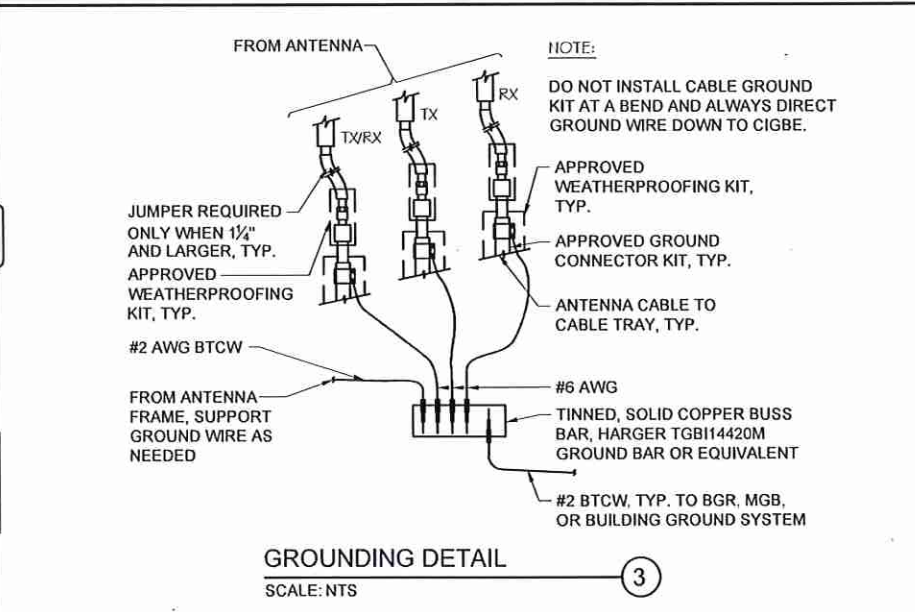
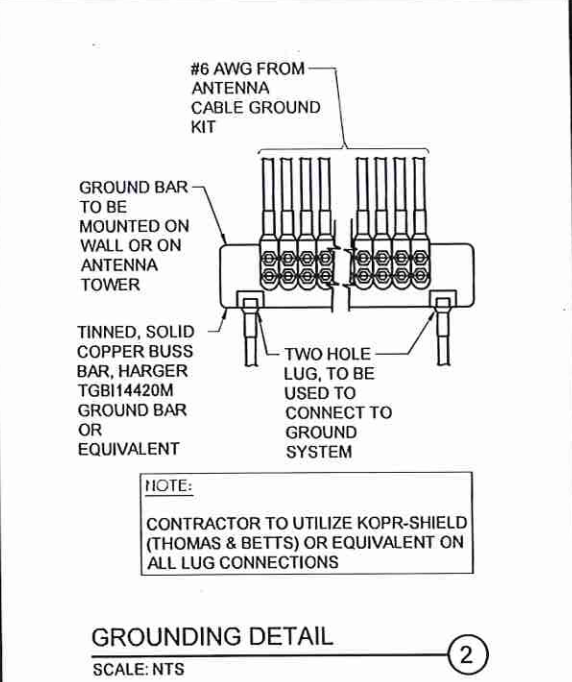
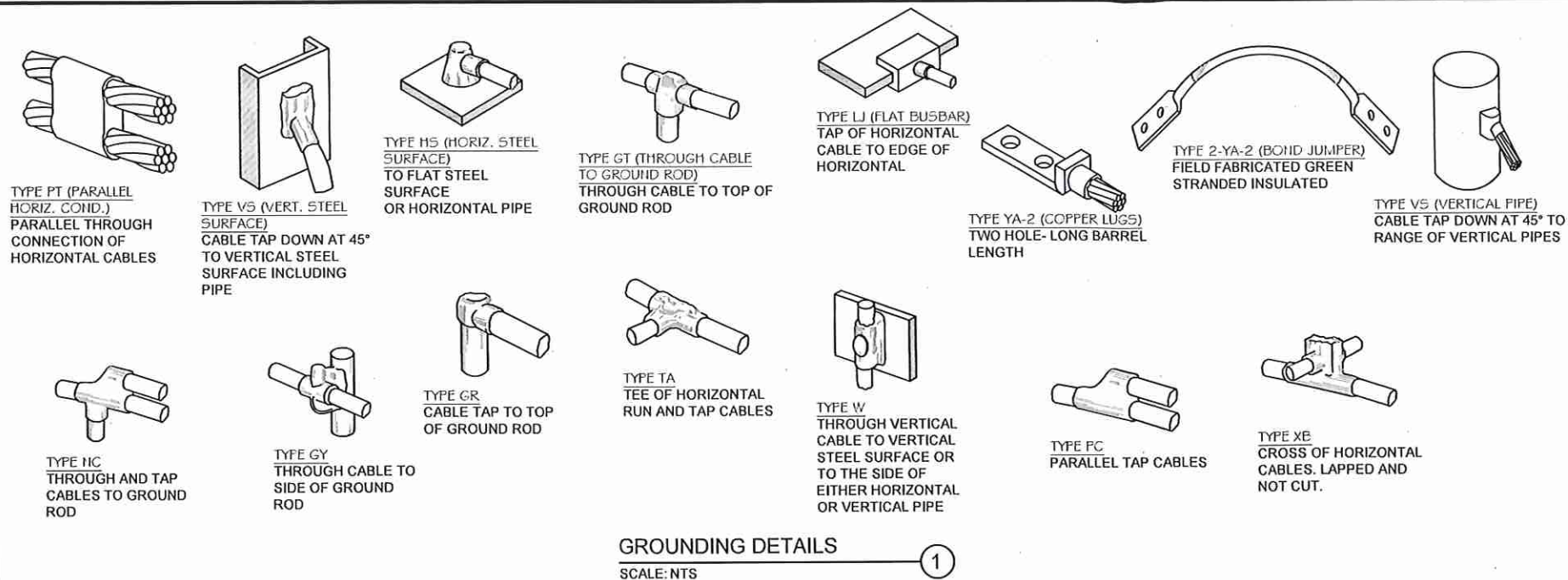
SHEET TITLE:

GROUNDING NOTES

SCALE: NONE

PROJECT NUMBER	55895
SHEET NUMBER	G-1

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PROFESSIONAL ENGINEER
JAMES R. SKOWRONSKI
#45690
EXPIRATION DATE 12/31/2022

N.J. PROFESSIONAL ENGINEER #45690
COMPANY CERTIFICATE OF AUTHORIZATION
#24GA26109400, Exp. 04/30/2024

2	12/01/22	REVISED TO INCLUDE PARCEL MAP
1	09/03/22	REVISED PER LL COMMENTS
0	05/25/22	ISSUED AS FINAL

MARK	DATE	DESCRIPTION
ISSUE	FINAL	DATE ISSUED 05/25/2022





PROJECT TITLE:
NJ01221A (NY54XC668)

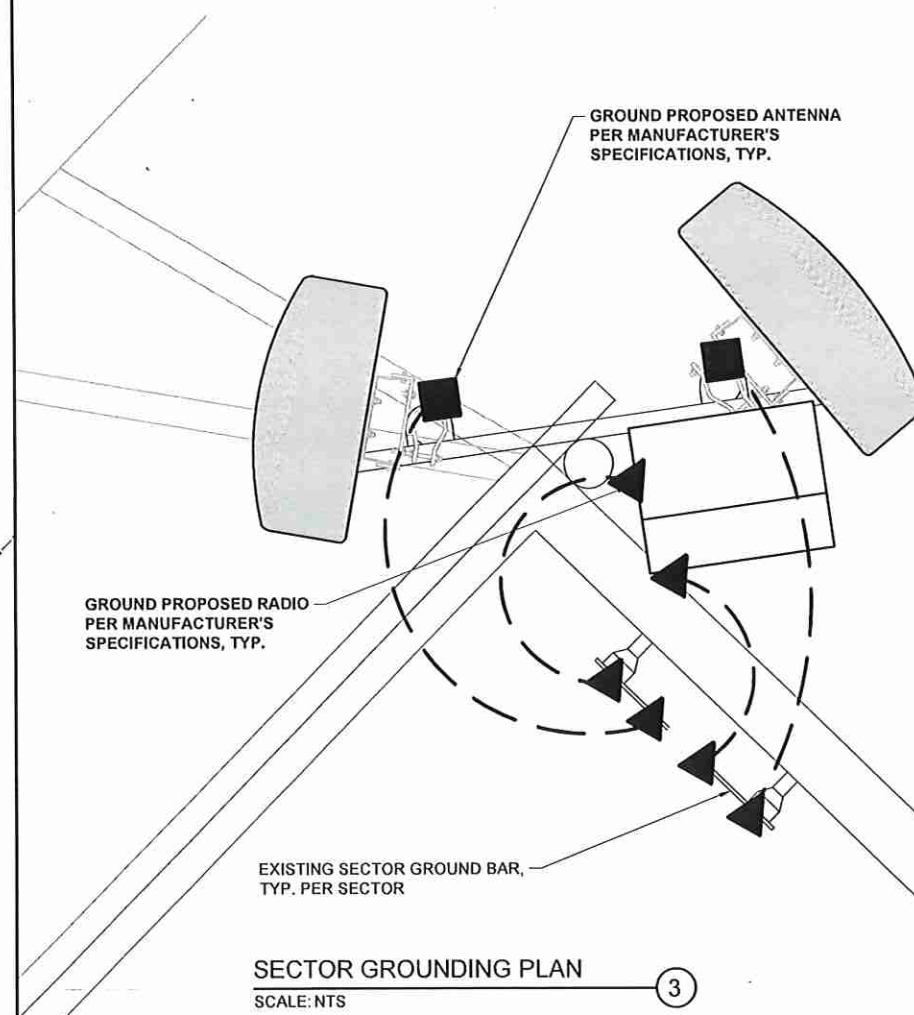
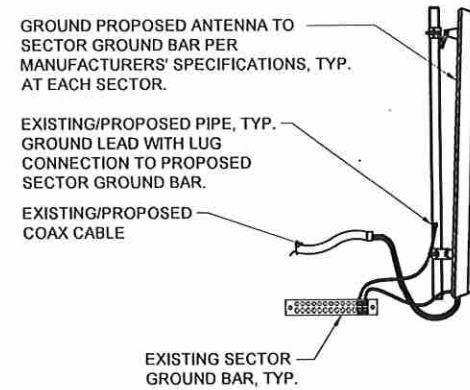
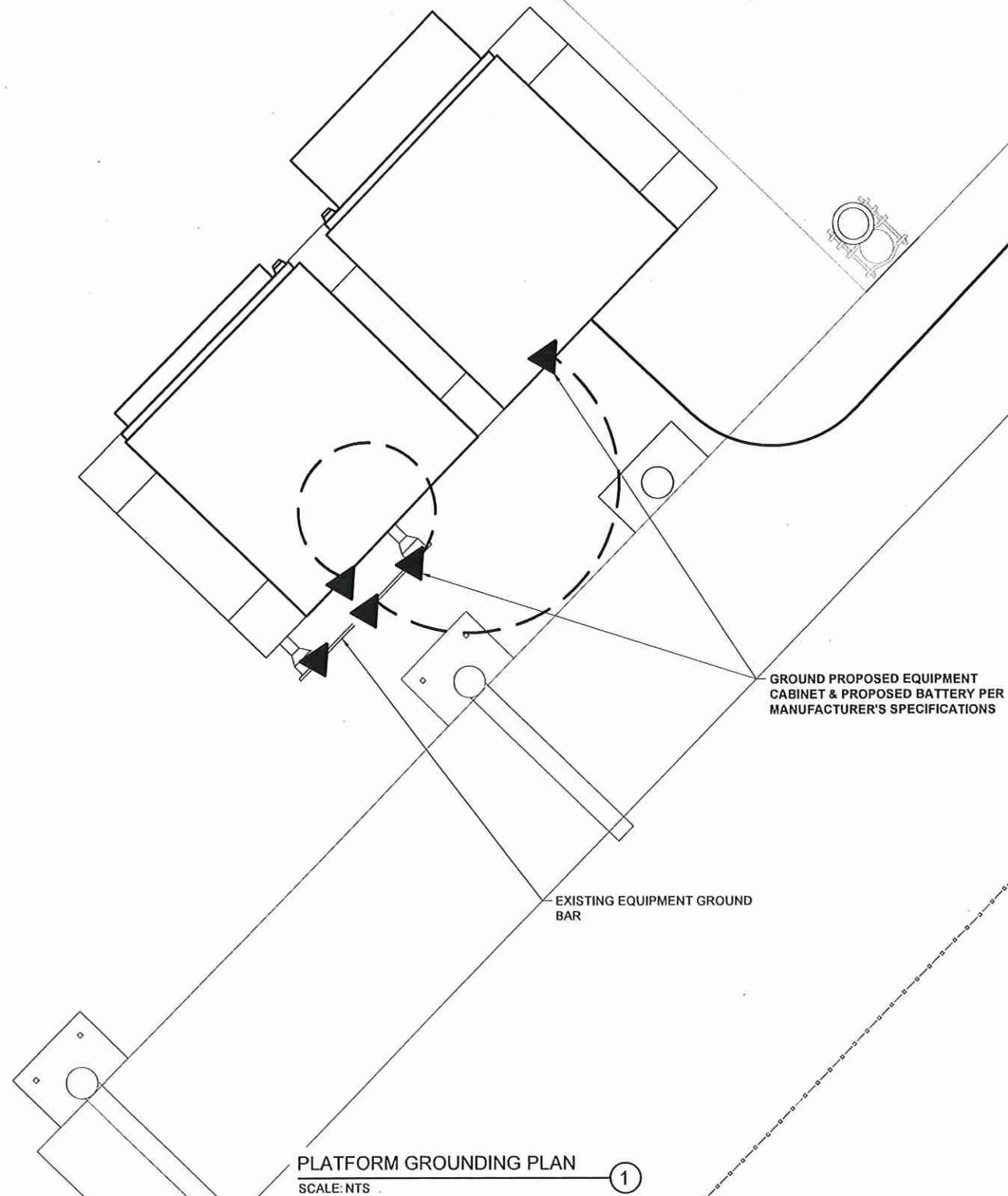
PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
GROUNDING DETAILS

SCALE: NONE

PROJECT NUMBER	55895
SHEET NUMBER	G-2

LEGEND:	
	EXISTING GROUND CABLE
	PROPOSED GROUND CABLE
	MECHANICAL CONNECTION
	EXOTHERMIC CONNECTION



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1	05/03/22	REVISED PER LL COMMENTS
0	05/25/22	ISSUED AS FINAL
ISSUE PHASE FINAL DATE ISSUED 05/25/2022		

PROJECT TITLE:
**NJ01221A
(NY54XC668)**

PROJECT INFORMATION:
318 GARRISON ROAD
PHILLIPSBURG, NJ 08865
WARREN COUNTY

SHEET TITLE:
GROUNDING DETAILS

SCALE: NONE

PROJECT NUMBER	55895
SHEET NUMBER	G-3